Integrating Care
Learning from first generation integrated primary health care centres

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# Glossary

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACCHS</td>
<td>Aboriginal Community Controlled Health Service(s)</td>
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<td>AHS</td>
<td>Aboriginal Health Service</td>
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<td>APHCRI</td>
<td>Australian Primary Health Care Research Institute</td>
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<td>CH</td>
<td>Companion House</td>
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<tr>
<td>FASSTT</td>
<td>Forum of Australian Services for Survivors of Torture and Trauma</td>
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<td>IHSM</td>
<td>Integration of Human Services Measure</td>
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<td>IPHC</td>
<td>Integrated Primary Healthcare Centres</td>
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<tr>
<td>NGO</td>
<td>Non-government Organisation</td>
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<td>SNA</td>
<td>Social Network Analysis</td>
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<td>WNAHS</td>
<td>Winnunga Nimmityjah Aboriginal Health Service</td>
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<td>WHO</td>
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Background

Recent Australian health care policies have focused on strategies to increase efficiency, reduce inequalities and improve health outcomes by building a stronger primary health care system. At the time this research was commissioned, the establishment of GP Super Clinics was a significant strategic element of primary health care system reform, although this has now transitioned under subsequent governments to a focus on Health Care Homes. The research described in this report was funded by the Australian Primary Health Care Research Institute (APHCRI) in 2013 as part of a research program investigating the features of GP Super Clinics that contribute to achieving the objectives of integration. Specifically, this program of research explored co-location as a strategy for promoting service integration within multidisciplinary primary healthcare clinics, to identify developmental and operational characteristics that promote successful integration.

Key elements of all 'extended general practice models' are a focus on improving integration to drive quality of care, chronic disease management and prevention; coordination between and across services; increased access, and possibly the promotion of workforce development. While such services have been differentiated from 'broader primary health care centre models' such as Aboriginal Community Controlled Health Services (ACCHSs), both GP Super Clinics and ACCHSs share an integrated, co-located model of service. While we acknowledge there are significant differences (including the Non-Government Organisation (NGO) focus, not-for-profit status and specific Aboriginal employment contexts) for ACCHSs compared to Super Clinics, many of the challenges of establishing and sustaining integrated primary health care are common across both service types.

Any initiative seeking to understand characteristics of integrated primary healthcare centres (IPHCs) is likely to derive useful lessons from ACCHSs, which predate the GP Super Clinic model by nearly 40 years. The ACCHS sector has established strategies to ensure collaboration across disciplines, to be properly responsive to changing community needs, and to build effective links within and across services. In many cases, these models have benefited from the fine tuning and maturity that accompanies several decades of implementation. Many of the quality innovations in primary health care which are now moving into broader general practice settings, from quality indicators to the Health Care Home, were pioneered in the ACCHS sector.

Newer models of co-located integrated primary health care are also offered by some community-based refugee health services which provide co-located, integrated psychology, medical, nursing and social care services. These broad-based primary care services for specific populations offer more social service support than the IPHCs which focus on primary medical care for general populations, but both models share the primary care mandate to provide patient-centred, whole person care.

This research report describes two case studies exploring characteristics of two different co-located, integrated services: a mature integrated ACCHS, Winnunga Nimmityjah Aboriginal Health Service (Winnunga Nimmityjah AHS); and a rapidly expanding IPHC, Companion House, supporting refugees and asylum seekers. These services are both award-winning organisations that provide primary general practice (GP) medical care as well as more generalised health services to members of their local community. They function as exemplar case models, each highlighting different challenges that IPHCs may have. Both organisations are important community hubs and have had to frequently adapt to shifting needs and priorities of both their communities and of government policies that impact them directly.
CONCEPTUALISING AND DESCRIBING ‘INTEGRATION’

Enhanced integration of health care services is an important approach to improve health system performance, as part of health care reforms in response to changing demand and increasing complexity in health care services worldwide. In particular it is seen as an approach that can rebalance the health care system towards better prevention, disease management, self-care, coordination and an improved experience for patients. The World Health Organisation (WHO) has stressed the need for comprehensive and integrated primary health care services that ensure continuity of care including within and across the secondary and tertiary sectors.

WHO also acknowledges the variable scope of integration strategies which include differing types of integration (horizontal, vertical) as well as widely varying goals (reduced cost, improved quality, access or satisfaction). Horizontal integration focuses on overcoming professional and departmental boundaries to develop teamwork and link services within a system level. Vertical integration focuses on links between services operating at different levels. As a result, many definitions of integration in a health care context have been proposed. In this project we adopted the WHO working definition of integration as “the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money” (p 1).

In the UK, the National Health Service (NHS) Confederation described a typology of healthcare integration that encompasses four dimensions of integration. This typology is outlined in Figure 1, and the dimensions include:

- **Organisational integration** (how the organisation is formally constructed including structural arrangements, governance systems and links with other organisations)
- **Functional integration** (links between non-clinical and back office functions and the frontline clinical units)
- **Service integration** (links between clinical service units within the organisation), and
- **Clinical integration** (links between professionals in and across clinical teams that impact on processes of care for patients)

Fulop et al identified procedural and cultural factors that may be as significant as structural and governance components, in driving effective integration

- the role of shared values in attaining coordination and collaboration (*normative integration*), and
- the coherence of rules and policies within an organisation (*systemic integration*).
Drawing on these principles, Shaw et al. distinguish between ‘integration’ and ‘integrated care’. They suggest that “integrated care is an organising principle for care delivery that aims to improve patient care and experience through improved coordination”, while “integration is the combined set of methods, processes and models that seek to bring this about”.10 (p 3, emphasis added).

In developing a theoretical stance for the study, we drew on the work of Shaw et al., Fulop et al. and other international literature defining and exploring the meaning of integrated care.11,12 The outcome of this work, focused in primary care settings, is a conceptual framework described as the Rainbow Model of Integrated Care, which identifies 59 key features across six dimensions.13 Importantly, this work starts to place patients at the heart of any model of integration. Singer and colleagues have also argued for an increased emphasis on patients as active participants in integrated healthcare. They distinguish the processes that organisations use to deliver care from the care that patients receive, arguing that studies of integrated care should explore whether integration is meeting the needs of the patient.14

We viewed integration from two perspectives: as an organisational process, and as a service or system outcome for the patient. In the former, integration refers to the clinical and administrative coordination and collaborative work undertaken by individuals and teams to deliver services in an ‘integrated way’. It can be conceptualised or described in terms of the processes or interactions used to achieve clinical goals, or improve service access or system efficiency. In the latter, integration is perceived by the patient as the connectivity, alignment and coherence of the lived experience of service utilisation.11

From both of the above perspectives, integration of care is seen as a means to improve services in relation to access, quality, user satisfaction and efficiency. These dual foci, on process (organisation’s perspective) and outcomes (patient’s perspective), help us to understand the sustainability, efficiency and effectiveness of health service integration.

**FORMAL AND INFORMAL MECHANISMS**

In developing a conceptual model to frame data collection and analysis, we drew on literature relating to the formal and informal mechanisms that underpin organisational processes and workplace interactions. We reasoned that these social and structural attributes might support collaborative and sustainable interdisciplinary practice for co-located primary care services, as well as effective transitions of care outside the service, and community enfranchisement in the direction of the service.

The organisational management literature suggests that organisations that have established high value among their stakeholder communities, and are able to maintain staff who collaborate across disciplines, do this through both formal and informal mechanisms.15 However, formal and informal descriptions of work practice and processes may vary markedly16 and there is limited evidence on how this may occur in co-located primary health care services, with health disciplines that may be less than comfortable working together and are often under stress. Powell-Davies and colleagues point out that the transition to IPHCs can challenge existing professional roles and necessitates a considered approach to leadership, change management and organisational development.4

While formal relationships are generally understood to be the types of written, formalised modes of interaction usually seen at the level defined by NHS Confederation as “organisational”,13 the nature and function of informal relationships in organisations is the subject of many contested definitions and interpretations.17-19

Informal communication and information exchange processes are powerful elements in organisations, as the greater the degree of informal relationships within a team, the more cohesive that team tends to be.18,19 Krackhardt and Hanson have described formal structures as the “skeleton” of an organisation, and the informal as the “central nervous
system, driving the collective thought processes, actions and reactions of its business units. This metaphor establishes some important rules: an informal network requires a solid formal network to operate effectively, and informal networks are more complex in arrangement than the formal networks, but can be a powerful resource for an organisation.

The formal organisation is set up to handle easily anticipated problems. But when unexpected problems arise, the informal organisation kicks in… Highly adaptive, informal networks move diagonally and elliptically, skipping entire functions to get work done.\[8][p.104]

In primary health care, formal communication is perceived as being related to business and administrative matters, while informal communication is more common and the preferred mode for resolving patient care issues. Informal networks often have greater impact on who individuals seek out to assist with their work within clinics, and informal processes may be more relevant to daily work than formally regulated ones. Bunniss and Kelly describe shared learning occurring through experiential, evolutionary and implicit processes, which often happen unconsciously throughout the working day. The emergence and repetition of improvised work practice through informal communication can facilitate the introduction of new work procedures.

The location of activity, as well as timing, spatial arrangements and which individuals are present can all affect the interaction style. The informal communication between staff frequently occurs in ‘hidden’ spaces, or “the backstage”, rather than the clinical “front stage” where patient encounters occur. Backstage settings such as staff rooms, corridors, reception areas, changing rooms and store rooms are places where roles and the norms of interaction associated with the front stage appear more relaxed. Identifying these spaces, maintaining their integrity and supporting their use can facilitate integration.

Waring and Bishop delineate six functions of informal relationships that play out in these spaces,

> **critical reflection**, which assists experiential learning and the identification of potential and actual sources of risk
> **collective sense-making**, contributing to the formation of a shared and less ambiguous understanding of work events
> **functional contributions** to problem-solving and dealing with change in context
> **communication and follow-up**, assisting colleagues in deciding on future action and reporting
> **supportive and emotional**, providing a cathartic outlet and emotional support to anxious colleagues, and
> **cultural and professional**, reinforcing the expectations, norms and values of professional socialisation, practice and identity.

These ‘inward facing’ functions that unfold as part of the work space/time continuum have been described elsewhere. Bunnis and Kelly, in their study of informal learning and change processes, reported that cross-disciplinary primary care teams described on-the-job collective learning with a high degree of consistency. This process is valuable because it represents the ‘coping mechanism’ that underpins everything they do. When questions present themselves, they learn from their colleagues how to provide necessary care. Answering a colleague’s question also allows them to perform a caring as well as a teaching role, creating a reciprocal dynamic.
DESCRIBING AND MEASURING INFORMALITY

Understanding informal networks can shed light on organisational challenges, the nature of collaboration and the ways in which organisational work is shaped and undertaken.\textsuperscript{24,25} However, informal processes and mechanisms can be difficult to identify, capture and measure.

Several authors have proposed that a useful device for approaching the description of informal networks of interaction in an organisational context may be Social Network Analysis (SNA). D'Errico and colleagues applied network techniques to an organisational case study of informal ties and concluded that SNA “can help the decision maker in modelling and understanding informal ties” (p 1930).\textsuperscript{24}

Bishop and Waring have further developed this approach by incorporating SNA into a mixed methods approach to investigate patterns of interpersonal relationships in health care delivery. They reasoned that,

The underlying rationale for the mixed methods approach was that quantitative SNA would identify the aggregate patterns of relations within a particular bounded network, whereas qualitative work would ground this within the meanings and processes of these relations. In other words, the former would be able to illustrate a network’s “skeleton” of structured relationships, whereas the latter would provide detail of the “muscle and sinew” that make up the shared meanings, norms and identities (p. 312).\textsuperscript{26}

More detail on the SNA methods is provided later in this report.
Methods

The project undertook two service-based case studies focused on questions related to

- the enablers and barriers to achieving integration of different service types
- the enablers or barriers to achieving objectives of improved integration and access across governance and ownership, service scope, community engagement, multi-disciplinary teams, education, funding, and shared services
- measures of service quality adopted for individual services and for the centre as a whole, as well as frameworks for quality improvement.

The project aimed to,

- identify the key social and organisational attributes of sustainable interdisciplinary work within co-located IPHCs
- describe the model(s) used by these services to ensure organisational stability and community responsiveness
- develop a set of indicators describing attributes for sustainable and responsive integrated primary health care which can be applied by IPHCs.

RESEARCH DESIGN

This project employed a case study design using an ethnographic, mixed methods approach to develop two case narratives illustrating different service models of integrated primary health care and their historical, contextual and operational features.

Winnunga-Nimmityjah Aboriginal Health Service (Winnunga Nimmityjah AHS)

Winnunga Nimmityjah AHS is a mature, integrated primary health care service which had an active client base of around 4,000, and a growth rate of 80 new clients per month in 2015. The service employed 68 staff at the commencement of the study, however this number fluctuated over the period of data collection. Winnunga Nimmityjah AHS is a long-term primary health care service which meets all the program objectives and service delivery models outlined in the original GP Super Clinic Program objectives. Established in 1988, it is now one of the largest and most innovative ACCHSs in Australia. The services provided are broad, including social support; general and specialist medical care; dentistry; allied health; nursing and midwifery, and psychology. The Social Health Team has a strong focus on Aboriginal and Torres Strait Islander staff providing a range of community and social services, including housing support; youth mental health; justice health; drug and alcohol, and smoking cessation in addition to support for community groups. The organisation is active in linking with external agencies and developing in-house services with relevant government and non-government organisations such as Relationships Australia, ACT Probation and Parole, and ACT Housing. Winnunga Nimmityjah AHS is also the ACT state affiliate to the National ACCHS peak body and, in that role, is involved in policy development and advice. Winnunga Nimmityjah AHS is governed by a skills-based Board comprised of and voted for by Aboriginal and Torres Strait Islander community members.

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1 Social entrepreneurship was defined using the definition by Peredo and McLean: Social entrepreneurship exists where some person or persons (1) aim either exclusively or in some prominent way to create social value of some kind, and pursue that goal through some combination of (2) recognising and exploiting opportunities to create this value, (3) employing innovation, (4) tolerating risk and (5) declining to accept limitations in available resources.
Companion House

Companion House is a rapidly expanding IPHC with a client base of approximately 1,300 people and a current staff of 28. Companion House is a specialised rehabilitation service for refugees and asylum seekers, providing medical services to refugees and asylum seekers for the first few years after resettlement; and counselling services, community development and outreach for survivors of torture and trauma without reference to how long they have been in Australia. It is part of the Forum of Australian Services for Survivors of Torture and Trauma and the only one of the eight member services to have an integrated, co-located medical service. Companion House is governed by a Board comprising elected community members. The service is not led by the population served by Companion House (current or former refugees), although they may serve as part of the community Board.

CONCEPTUAL MODEL

Figure 2 sets out the conceptual model of integration that we used to frame data collection. We conceptualised that the process of integration occurs across the four domains identified by the NHS Confederation (organisational, functional, service and clinical), and that the outcomes of integration should be identifiable to the users of health services. In this conceptualisation, normative and systemic integration function as internal environmental influences or enablers.

Figure 2: Data collection framework

Within this model, a service with excellent functional integration may theoretically not have good clinical integration—a patient or staff may, for example, view the service as oriented towards administrative efficiency rather than seamless patient care. A service with excellent clinical level integration, without organisational or service integration may have sub-battles between service units or between ‘frontline staff’ and ‘management’ while delivering high quality care to patients or enabling strong inter-professional collaboration at an individual level.
These processes and outcomes occur and are interpreted within the context of political and sociocultural influences which form part of the service operating environment. These contextual factors, though outside of the organisation itself, affect the organisation, its staff and patients. Some contextual factors may be generic to the primary care or health service sector, while others may be specific to the nature or location of the service. For instance, traditional hierarchies and power struggles between healthcare professions may impact on an organisation’s ability to achieve service integration and optimise clinical performance.

Policy and services for Aboriginal and Torres Strait Islanders, as well as refugees and asylum seekers, shifted rapidly and were publicly contested during the period of this study. These two organisations operate within social and political contexts that are potentially more complex, subject to change, and difficult to navigate than most Super Clinics or other IPHCs. They are exemplars of sustained maintenance of integration in the face of contextual challenges. The data collection process was designed to gather a range of data types and perspectives that would incorporate and illuminate these issues.

DATA COLLECTION

Data collection was undertaken utilising the rapid appraisal methodology previously developed and tested in general practice by members of the research team. A research assistant was trained to undertake a series of visits to each service over a nine-month period. During each visit, a range of qualitative and quantitative data was collected using a purposive sampling strategy that sought to identify a wide variety of personnel and stakeholders across the breadth of each service. Detailed, descriptive case studies focusing on each of the primary health care services were constructed using the following methods which are designed to capture the dual perspectives on integration outlined previously.

Integration as service process

Following the elements of our conceptual design, we set out in short visits to the services to capture both formal and informal mechanisms of interacting. Data collection incorporated

(a) Mapping of the physical environment and structural elements of each service. This included organisational structure as well as physical environment of the practice through documentation of floorplans and observation of work and patient flow within the physical space.

(b) Interviews with both clinical and administrative staff members (Winnunga Nimmityjah AHS, n=6; Companion House, n=5), selected using a purposive sampling frame which addressed critical perspectives identified during social network analysis and observation visits. Interviewees were selected to encompass different disciplinary groups, differing lengths of experience with the service, and different positions in the organisational structure. Interviews were conducted on site (where possible as a walking interview), to facilitate the effect of context on generating narrative rather than simply relying on researcher questions. The interview schedules are included in Appendix A.

(c) A bounded social network analysis (SNA) to describe inter-professional and inter-agency interaction for each service, in terms of both the formal and informal networks described by staff. A social network survey was developed (Appendix B) using a modified version of Browne’s Integration of Human Services Measure (IHSM) to describe inter-professional and inter-agency interaction. The IHSM is a validated tool for capturing quantitative data on inter-agency interactions in networks of human services, and allows comparison of

(d) observed scores with idealised scores reflecting best possible integration. We adapted this to enable assessment of intra-service networks at both the team
and individual level, and to capture the influence of structural inputs such as co-location and the importance of formal and informal networks. Data were collected from the majority of staff in both organisations (n=83; Winnunga Nimmityjah AHS, n=55; Companion House, n=28).

(e) An oral history of each service was constructed including illustrative narratives of success and failure over time, through an extended interview with service leaders.

Integration as service outcome

To investigate integration as an outcome, we explored the perspectives of patients/clients using two qualitative approaches,

(a) Interviews with patients with chronic disease, to capture iterative patient perspectives on service integration (Winnunga Nimmityjah AHS, n=10), focus groups with patients (Companion House, 8 groups, n=36). All interviewees and members of focus groups were current clients of the respective service.

In both services, staff assisted the researcher to recruit patients using a sampling frame. Inclusion criteria for patients at Winnunga Nimmityjah AHS were,

> at least four presentations to the organisation during 2014
> aged 18 years or over
> have at least two chronic health issues, and
> use at least three services.

Inclusion criteria for patient focus group attendees at Companion House were, at least three presentations to Companion House during 2014,

> aged 18 years or over
> have a chronic health condition, and
> use at least two services.

At Winnunga Nimmityjah AHS, a researcher accompanied interviewees on a visit to the service (excluding into the consultation room itself) to observe and document navigation through the physical space and between conceptual components of each service. Interviewees were asked to reflect on integration issues around provider interactions. These iterative discussions unfolded along the process of navigating and engaging particular service elements, and incorporated reflections on patients’ illness and service utilisation over time.

At Companion House, eight guided discussion groups were held over a meal in the public meeting room. Five accredited community interpreters and one experienced, non-accredited interpreter assisted in interpreting the questions into seven languages (Karen, Burmese, Mon, Dari, Persian, Tamil and Arabic). Participants in each group reflected on their experiences in navigating Companion House and the wider health sector. Explicit permission was provided to elicit negative comments, or ‘ways the service could improve’. Although many participants initially said that they had no criticisms of the service, after several iterations of discussion many listed ways to improve. Data were recorded where available and back-translated by the interpreters. Participants were provided with an aerial map of the room space of

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The type of patient data collection method was determined by the service. Companion House has a principle of not supporting individual interviews due to the vulnerability of newly arrived refugee and asylum seeker populations. This service has an established practice of community feedback meetings, so focus groups fitted better with established practice. WNAHS supported individual interviews with patients.

The looser criteria for inclusion in Companion House focus groups reflects the younger age group of this population (median age, 25 years).
Companion House and asked to indicate the spaces of importance to them in the service.

(b) An ‘egonet’ social network analysis (SNA) of patients’ self-constructed care teams

Interviewees and focus group participants were also asked to construct a visual representation of their personal health network relating to the service. These were constructed as ego-networks (that is, the network of providers surrounding or centred on the patient; these networks would not include service staff who the patient did not consider relevant to them). In order to capture these networks, patients were asked to draw them using a diagrammatic tool that indicated relative importance of individual service staff to the patient (ego) and their proximity to other individuals (alters) in the network. Participants were encouraged to articulate and consider the relationships of their entire health care support network, to view themselves as central to their own care, and to reflect upon the integration which allows this. This process is a validated mode of capturing patient reflections on their own health networks and is illustrated in Figure 3.

Figure 3. An interviewee working out their own health network on a magnetic board.

The large red circle in the centre of the diagram represents the patient/interviewee. On the left side are the staff they see at the service, and on the right, the individuals at other services who contribute to their health. Staff member proximity to the central red circle (ego) indicates relative importance to the interviewee. There is no significance to the colour of the circles.

Social Network Analysis

The literature on formal and informal mechanisms within organisations establishes a general consensus that SNA is the best method for articulating the informal ties and networks within organisations. SNA has also been used previously in Australia to evaluate the impact of mental health training strategies in the primary care context, and in evaluating inter-professional learning in health service education.

Two types of SNA were employed in this study,
• a **bounded** SNA which explores the web of interactions and relationships between all agents within a demarcated space or entity such as an organisation, geographic location or service configuration (i.e. the network inside a given ‘box’ of agents); and

• an **egonet** SNA which explores the network of people (alters) and relationships surrounding an individual agent (or ego), that is, the network around an individual agent.

SNA usually focuses on a specified type or types of relationship or interaction between pairs of people, called dyads, and may assess this relationship from one or both perspectives—so data may be uni- or bi-directional.

**The bounded network analysis**

This SNA provides a picture of staff interaction networks as an organisational characteristic. We hypothesised that connections between staff, both formal and informal, would be fundamental to the *process* of integration within the organisation. The multi-layered data consist of a series of integration scores across functional sub-units within each service as well as a graphic representation of the density and connectivity of staff networks.

Our tool captures reciprocal relationships between pairs of staff members (dyads) in terms of problem solving relationships. Respondents were asked to indicate which of their colleagues they would approach to help them solve or manage problems related to the integration and coordination of care for patients with complex needs, and the frequency with which they would do this (using a rating scale). Respondents were then asked how often the same colleague would approach them in the same way.

This approach resulted in a multi-modal dataset known as multiplex data. Multiplex data creates several challenges for analysis including the fact that there are several data points for each relational tie. To overcome this problem, we used the mean score for each directional tie (mean, A→B according to A and according to B) and also assessed the reciprocal relationship tie (mean, B→A according to A and according to B).

Respondents were asked to consider whether this occurred through formal or informal mechanisms and interactions, providing data on the formal and informal problem-solving networks within each organisation. This enabled us to compare the features of formal networks with informal ones, noting the different sizes, densities and individuals who occupy central positions.

**The egonet analysis**

SNA draws on the social capital literature. The modification used in this survey focuses on health professionals as part of an individual’s ‘health resource capital’ or personal resource network, and provides a representation of the types of personal health support networks constituted by patients to help them manage their health. We theorised that this perspective would demonstrate the way patients understand the nature and value of integration between care providers both within and external to services, and illustrate their perception of integration as an *outcome* or experience of health care. We examined the networks that devolve outwards from each central individual, and conceptualised these as the networks generated by patients for the purpose of health and wellness. They may include health care

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*v* In managing the multiplex data, we also compared what other people (alters) said about the connectivity of each individual with what they said themselves (egos). There was a wide range of variability across individuals, but on average the ego source data tended to overestimate relations relative to the alter source data. It is impossible for us to know which of these perspectives is most likely to be ‘correct’. The ego source data also contained a number of missing values. In order to minimise the impact of these issues we elected to use an approach where we derived the mean of the two responses for each relation (where two data points existed) and used the single value where only one existed. Overall, this provided relatively reliable data with few gaps.
professionals, provider organisations, neighbours, friends, carers, community organisations and volunteers.

Participants were asked to identify,

- all the health care workers they see inside the service and how important they are to their care (indicated by proximity to ego i.e., most important in the inner ring)
- all the health care workers you see outside the service and how important they are to their care (indicated by proximity to ego i.e., most important in the inner ring)
- other people who are important to them in managing or maintaining their health, and
- how strong the links are between all of these people (proximity to each other).

These data enable us to capture information about the size and density of individual health networks, to quantify proximity scores, and to consider the types of support and network features that are most valued by patients, as well as a patient-oriented view of the degree of network integration.

ETHICS APPROVAL

This study received approval from the ACT Health Institutional Human Research Ethics Committee, the Australian National University Human Research Ethics Committee, and the Boards of Winnunga Nimmityjah AHS and Companion House.

DATA ANALYSIS

Qualitative data were stored, managed and coded using NVivo 10 (QSR International). Quantitative data has been managed in Microsoft Excel (Microsoft Corporation) and SPSS v22 (IBM corporation), with social network data also analysed using UciNet software (Analytic Technologies).

Data were analysed in accordance with structured cross-disciplinary collaborative analysis. Interview transcripts were analysed by at least two researchers using thematic analysis, assisted by NVivo 10 software. Themes which emerged from these interviews were used to collate the most significant statements made by participants in relation to the integration of care, patient-centredness, roles of community, family, and friends, and types of support. This thematic structure was collated and cross-referenced across maps and social network data to triangulate results and strengthen integrative conclusions.

A project reference group guided interpretation of results, consolidation of findings and development of translational outcomes. This group reflected stakeholder, consumer and policy and content/context expertise, including community representatives with and without governance responsibilities relating to each service. The reference group met twice by video conference during the course of the project.
Results

CASE STUDY 1: Winnunga Nimmityjah Aboriginal Health Service

Winnunga Nimmityjah Aboriginal Health Service began as a small medically focussed part-time clinic in 1988 in rented rooms in the centre of Canberra. It moved to a small house in inner Canberra, retrofitted to function as a medical clinic, expanding to incorporate an increasing formal focus on social services, some of which were located in rooms at the nearby shopping centre. The service moved to its larger current premises in Southern Canberra in 2005. Here it had sufficient space to grow to a large multidisciplinary health service that provides social services, general practice, midwifery, psychological care, physiotherapy, dietetics, audiology and visiting psychiatrist, ophthalmologist, endocrinologist and obstetrician.

Winnunga Nimmityjah AHS articulates its mission as being to care holistically for clients’ social, emotional and health care needs. The objectives listed on their website (Box 1) demonstrate the breadth of the social endeavour that underpins this integrated social and health care service.

<table>
<thead>
<tr>
<th>OBJECTIVES OF WINNUNGA NIMMITJYAH ABORIGINAL HEALTH SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To provide consistent and effective services to Aboriginal and Torres Strait Islander communities in the region, including communities on the New South Wales side of the border, where such a service may be required</td>
</tr>
<tr>
<td>• To work with other community organisations and where desirable to form partnerships with other organisations with the aim of promoting better health for Aboriginal and Torres Strait Islander people</td>
</tr>
<tr>
<td>• To advocate the needs of Aboriginal and Torres Strait Islander peoples to appropriate organisations, including government organisations</td>
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<tr>
<td>• To undertake holistic health care services</td>
</tr>
<tr>
<td>• To deliver health care services in ways that are supportive of the living preferences of people</td>
</tr>
<tr>
<td>• To support self-reliance in health care through the provision of appropriate support to Aboriginal and Torres Strait Islander people</td>
</tr>
<tr>
<td>• To provide services to Aboriginal and Torres Strait Islander peoples that alleviate the social determinants of poor health without limiting the scope of the services provided</td>
</tr>
<tr>
<td>• To auspice services and organisations that provide services to Aboriginal and Torres Strait Islander peoples of the ACT and surrounding region</td>
</tr>
<tr>
<td>• To promote, strengthen and maintain the social and cultural integrity of Aboriginal and Torres Strait Islander communities by ensuring that all programs operate in culturally appropriate and supportive ways</td>
</tr>
</tbody>
</table>

Box 1: Winnunga Nimmityjah AHS Objectives


The oral history described challenges of growth in the organisation which, on the one hand, allows them to better meet the breadth of client need but, on another, came with the inevitable cost of organisational complexity and funding challenges. The organisation has tried to ensure client needs have driven the development of new services or increases in
existing services. The CEO clearly articulates communication as being important in integration.

In one sense, the small organisation was easier to manage because staff were in the thick of the client service delivery and client need was obvious.

We did a lot of outreach work so they'd be out and about getting clients, interviewing or working with them or getting them to detox or to other services. So even though we didn't have a great “system” like we do now, like communicating, but because we were so close to the ground we could see where we needed to put more effort and so that's how we built the service around client needs right from the word go (Oral history).

Given its current size, the organisational leadership now relies on more sophisticated management tools such as data reports and reviews. Key political and organisational relationships have underpinned the ability of the service to survive and thrive. Significant personal commitment of central individual staff has been critical to the organisation’s development.

Integration from within: the staff perspective

No staff member described integration at any level as an easy, emergent property; but rather, as something that had to be identified as worthwhile and worked towards. Many staff members discussed barriers to clinical integration or teamwork, indicating a keen awareness of the challenges. Integration between social services and health services for an individual was frequently represented as an ideal to be worked towards rather than an everyday process. In the following quote, a staff member describes the unlearning that needs to occur to work across disciplines and notes that mutual respect is the critical personal attribute for integrating clinical teams,

We're all working towards it [teamwork]. I think... like I said to the doctors before, like they're very educated and they're driven by... I think a lot of it comes back to where they're taught. And how they're taught. It's not their fault. They [medical team] have a lot of good doctors, a lot of them come to play sport and stuff like that. So I don't know...I think it'll eventually come. But it might take 20 years to get it right. But if you're not trying you're not having a go, are you? (Staff interview #6).

In part, this redrawing of boundaries by trial and error reflects the power dynamics between professions in the attempt at achieving integration. This tension needs to be negotiated and managed to minimise barriers to integration and maximise the potential for success. A clinician described this relationship from their own perspective,

It’s an as-you-communicate-and-negotiate thing, you’ll get to a shared thing, but it’s essential that they talk to us about what’s happening out there in the community because we don’t know, and that’s just as important as us going and talking to them about, well this is what I’ve found with this person, they’re saying that they’re homeless, that they’ve got no money, that they need petrol for their car or something or other, whatever, and it’s important that we talk well and they share their side of the story as well I don’t necessarily see that the doctors have all the answers so if they say no then that's fine with me (Staff interview #1).

Having different disciplines co-located runs the risk of amplifying inter-disciplinary tensions. Staff described ways that they mitigated this risk, often through conscious reflection. A staff member who had referred a patient to another team for a particular outcome which had not occurred provided the following reflection,

I don’t know, it could have been the right decision in his eyes. I'm not saying it’s the wrong decision, it could have been the right decision, but it’s just that
what I wanted as an outcome for that patient... I don't think... Whether that was because after he assessed the patient he thought "No, this is the best course of action" which is understandable but I'm still trying to work out how to approach [it again] (Staff interview #5).

In this case, a member of one team had made a clinical assessment which was not supported by a member of another team whose agreement was needed to broker a referral to a specialist. The interviewee expressed her discomfort about the decision, which she continued to believe was incorrect, but was tempered in her language about the clinician while attempting to work through ways to accommodate this difference in clinical opinion between colleagues. When probed by the interviewer, she interpreted this as an issue where there could legitimately be different approaches to achieve a desired outcome, although these had not been explicitly communicated. The apparent difficulty expressed by this respondent in articulating her responses to the disagreement reflects confidentiality considerations as well as the functional challenges imposed by traditional hierarchies, the differing values emphasised by professional cultures, and the role of effective communication in underpinning successful integration.

The generation and application of mutual respect was seen as a key strategy for enabling integration. Another clinician demonstrated this in a comment on leadership changeover in another team; and also provides an example of overall stability in that leadership roles are taken up capably,

   Our nursing staff show fabulous leadership and initiative in terms of caring for patients and going above and beyond and suggesting, do you think that’d be helpful with a Webster pack? Oh yeah that’s a good idea [laughs]. I think Sarah has done a great job of stepping up as team leader. Each time someone leaves and someone takes over you go [gasps] how’s this going to work? But Sarah’s done a good job (name changed, Staff interview #1).

One of the challenges identified by the CEO—partly because of the commitment to the organisational ethos (see below) —was staff working “too much” rather than making sure they are doing the tasks for which they were employed within the group of teams overall providing holistic care. This poses a problem to sustainability as well as being inefficient

   That’s what we’re trying to do now, get internal processes in place so that it’s seamless (Oral history).

Space

Winnunga Nimmityjah AHS is a large service in a retrofitted space. Staff members who had been there a long time recalled that the previous service (in a house in the Inner-North suburb of Ainslie) facilitated easier communication between clinicians. This was not just due to proximity, but also because of enforced sharing due to cost constraints.

   In Ainslie, we had really good communication because staff shared computers (Oral history).

With its smaller size, the previous service for clinicians appeared more open to the public, partly because it did not physically look like a traditional health service,

   At Ainslie, the waiting room was the lounge room and it was lovely, comfortable, and the doors to the outside, and it was really homely, and then we get to Narrabundah and it’s this L-shaped, seats against the wall, very much more a formal clinical setting. …. I think we lost a lot of our community interaction—I mean, there is still community interaction, people eventually figured out how to make it happen, but were all [gasps] this is not going to work! [Laughs] this is awful, you know, that thing is—but that’s beside the point, but anyway…the setting, how you work things, is important (Staff interview #1).
The larger service does have some spatial advantages. In reviewing maps of the service, staff identified backstage spaces that drove informal communication—for example, the lunch room, and the storage space ("we often have quick ‘corridor consultations’ about patients there"). The physical spaces of the current building also enable more private communication with staff and patients that can’t be overhead. Members of the social health team, who have a strong external focus, also commented positively about the growth in outreach spaces for the service as this was likely to drive better community integration, and hence their function as a social enterprise.

**Commitment to an organisational ethos**

Clinical integration may be inherently challenging, but commitment to a central organisational ethos is clearly one of the drivers of service sustainability and organisational integration. This reflects leadership—centrally in ensuring the organisation had a “leaderly” presence within the community—and in individual teams. Everyone we spoke to articulated their commitment to Winnunga Nimmityjah AHS’s mission of service to Aboriginal and Torres Strait Islander Australians, and to the principle of community control.

This consistency also reflects a wider commitment to the organisational ethos in the political and cultural context of the service. As staff regularly engage with the community through significant cultural events like the Sorry Day bridge walk, or by attending weekend sports for local teams, the lines between work and social, staff and community begin to blur. These activities contribute to the “collective sense making” and “cultural and professional” relationship strengthening that arise through informal communication mechanisms, as outlined by Waring and Bishop. During the data collection period, there were significant changes in medical staffing following a Board decision to move to exclusively employing full-time doctors, in an attempt to improve continuity of care. The right of the service to make such a decision and to discontinue a contract with committed, long term staff members because of a change in service priorities was never questioned, even by interviewees who were soon to leave the service because of this change.

Some staff members emphasised, in addition to a commitment to the principle of Aboriginal control, an internally driven passion as the reason for their commitment to the service and the community,

> What I do here is because I love this service, basically. I’ve been coming here before I even worked here, it’s a great service. So that’s why I do what I do, keep coming every day (Staff interview #4).

The commitment was articulated as being oriented first towards the patients, and to the organisational ethos that prioritised their needs. This superseded hierarchies between disciplines and supports team work.

> [Y]ou’ve got passionate people who… [laughs] who aren’t just there to make the money, they’re there to make changes, help people make changes, and the team approach is an understanding that you as the doctor aren’t God and aren’t going to be able to achieve it all by yourself, that you are just one part in a complex machinery to enable people to make changes (Staff interview #1).

**Communication**

All levels of integration are underpinned by good communication. Staff valued communication channels and tended to create or augment them when they were felt to be missing or inadequate, often filling gaps in formal communication with informal mechanisms. For example, clinical staff described increasing their informal communication in the absence of case-discussion meetings which had occurred in the past. Communication through email from management was welcomed by staff, particularly those working in administrative or part time positions, as it ensured that management remained a feature in their working lives,
and contributed to their sense of working within an organisation with coherent organisational goals—affirming their own commitment to the organisational ethos.

Formal methods of communication consisted of approaches such as organisationally endorsed documents about roles and responsibilities, structured and regular communications and scheduled meetings between staff. Informal communication occurred through 'backstage' chatting, expressions of emotion, and the sharing of 'artefacts'; usually in environments with shared norms and cultural values. Often the information exchanged is important for patient outcomes, but is deemed inappropriate for discussion through formal channels. This may be due to issues of confidentiality, as some sensitive information is not relevant to all staff working with a patient, or it may be to facilitate quicker referral within the clinic which may not be possible through the formal referral system.¹⁰

Social networks and communication

A review of the social network data indicated that staff used informal communication in different ways than they did formal communication. Both networks are quite dense indicating a great deal of communication in both modes; however, the informal network may be more densely connected than the formal network (Figures 4 and 5).

Figure 4: Informal problem-solving network  Figure 5: Formal problem-solving network

In these diagrams, each coloured square represents an individual staff member (or node), while each colour represents a team or unit within Winnunga Nimmityjah AHS (social health, reception, medical, nursing and allied health, management and administration). Lines between nodes indicate a relationship, and nodes are positioned consistently to enable comparison.

While this difference was measurable in the SNA, (1.1 c.f. 0.9, p=0.079, n=55) it failed to reach statistical significance. There was no relationship between density of an individual staff member’s networks and gender (ac<0.1), Indigenous status (ac<0.1) or team (ac<0.2). These data suggest that informal networks play a key role in problem solving to achieve integration of care in Winnunga Nimmityjah AHS, and are at least as important as formally constructed networks dictated by roles or organisational structure.

Which staff are most central or connected within Winnunga Nimmityjah, varies between formal and informal networks. The six most connected people in each network type are listed in Table 1 in rank order of centrality.
Table 1: Node centrality scores by network type

<table>
<thead>
<tr>
<th></th>
<th>FORMAL</th>
<th></th>
<th>INFORMAL</th>
</tr>
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<tbody>
<tr>
<td>WN55</td>
<td>9.91</td>
<td>WN55</td>
<td>9.57</td>
</tr>
<tr>
<td>WN1</td>
<td>9.46</td>
<td>WN14</td>
<td>9.09</td>
</tr>
<tr>
<td>WN13</td>
<td>9.30</td>
<td>WN18</td>
<td>9.03</td>
</tr>
<tr>
<td>WN18</td>
<td>9.28</td>
<td>WN37</td>
<td>8.97</td>
</tr>
<tr>
<td>WN34</td>
<td>9.20</td>
<td>WN34</td>
<td>8.94</td>
</tr>
<tr>
<td>WN14</td>
<td>9.16</td>
<td>WN5</td>
<td>8.89</td>
</tr>
</tbody>
</table>

(NB: Node centrality scores reflect the ‘connectedness’ and ‘influence’ of individuals or ‘nodes’ in each network. This analysis dichotomises the data—so reflects the size and shape of networks but NOT the frequency measures)

This highlights a core group of people who are highly central in both formal and informal networks: WN55, WN14, WN18 and WN34. Conversely, there are some individuals who figure more prominently in either formal or informal networks. At Winnunga WN5 and WN37 both emerge as highly central figures in the informal network. While WN13 and WN1 are prominent in formal networks, the most strongly connected figure across the board is WN55, followed by WN14, WN18 and WN34. These strongly connected individuals occupy diverse clinical, administrative and management roles.

In qualitative data, WN13 had been referenced prominently in both network types, but on subsequent investigation, figures highly on strength (frequency) of connections rather than network size. That is, this person has frequent connections within a smaller network inside the service, or is locally connected. In this case, the people who utilise this relationship do so very frequently (Figure 6), but when data are dichotomised for the centrality analysis this person becomes less prominent.

Interview results suggested that experience (years spent at the organisation) is more important in informal problem solving, while position within the organisational structure is more important in the formal network. This potentially means that when the most senior staff member is unavailable, individuals will ask someone with the most experience.

Figure 6: Most frequently used network ties only (formal and informal)
While reception staff tend to be central to the formal network, medical and administrative/management staff are most peripheral. By comparison, the informal network sees a more a more mixed core of disciplines and teams, with different individuals moving to the centre of the network (see Figures 7 and 8). Nursing and allied health team members, and the social health team, are very important in both formal and informal problem-solving networks.

Figure 7: Formal problem-solving network  Figure 8: Informal problem-solving network

These diagrams display the same networks as Figures 4 & 5, but in this case, are centred on the most connected nodes in each network. Consequently, nodes may shift position between diagrams.

Formal methods of communication—staff meetings, coordinated care plans, and the internal referral system—were all mentioned in interviews as areas for improvement. Staff meetings and case management meetings were not occurring regularly at the time of the interviews but have since been re instituted as regular practice. Informal methods of communication, which may be stronger and denser than formal methods are likely to have developed out of necessity during the absence of more formal mechanisms. The informal relationships have made ‘functional contributions’ and allowed for ‘communication and follow-up’ where formal channels have not been present.  

Flexibility and fuzzy boundaries

While the networks demonstrate some affinity of team members for each other (nodes of the same colour clustered together) the informal network in particular illustrates the role of informal communication mechanisms in integrating teams and increasing proximity to other members of the organisation, and blurring boundaries between teams.

Role flexibility is an important contributing factor to achieving patient-centred integration. While maintaining clear role boundaries is often seen as a factor in effective teamwork and collaboration, interviewees also noted the importance of being able to ignore the organisational boundaries when they clashed with patient outcomes,

Knowing everybody's roles and responsibilities, well it doesn't matter when a client's in need, you know what I mean? (Staff Interview #6).

The staff interviews highlighted the flexibility of the nurses in this regard,

You know, Karen and Pippa [names changed] have taken on that dual role of – well, triple role – of care coordinator, drug and alcohol, doing care plans, doing [laughs]… (Staff Interview #1).
While confirming that role clarity is a value that could be strengthened, the following respondent explains the need for shared responsibility in enabling integration and highlights the risk that strict demarcation can sometimes constitute a barrier to effectiveness,

> Probably communication and maybe knowing what everybody's roles and responsibilities are [could be strengthened]. Like everybody, not just like one person if that makes any sense? Because there are some things that people... there is a clause in our thing that says other duties as required, so you know... people forget that.

> So, it's not just one person's responsibility to you know, clean up the mess or whatever, so yeah. So, you know it's all got to work to make this place work, that's my opinion (Staff interview #4).

This overlay of fuzzy, flexible boundaries on top of clear underlying structures reflects the overlay of informal processes on formal mechanisms to optimise results.

The patient’s perspective

We conducted ten interviews with Winnunga Nimmityjah AHS clients (six female, four male, age range 23-70 years). All respondents reported that Winnunga Nimmityjah AHS was a welcoming service, and attributed improvements in their health to the service. A defining feature of the service, from their perspective, was a sense of community. Most participants reported that seeing members of the community when they had an appointment was a positive part of coming to Winnunga Nimmityjah AHS. Group activities such as the diabetes clinic and healthy eating group also influenced the decision to come.

> Well even though you might be sick on the day or crook, you know you'll come across someone that you know and it's a bit of a yarning place, catch up place, while you’re sitting here sick [laughs]. But you know, nine times out of ten, every time you come here you’ll run into someone... You know, it sort of takes the ease off." (Participant #2)

This sense of community transmuted into a feeling of family. An integrated service, from the patient’s perspective, feels like family, and is described in emotional terms. In the following quote a patient describes how once they are "known" to the staff they can be assured of belonging.

> But when I come in... all the receptionists know us... They're good, you know? It's not a... it's not a health clinic; I think it's more of a family thing. It's more family than anything else. Once they get to know you, you're right. That's the way I feel anyway (Participant #4)

Figure 9 shows a patient’s egonet diagram. The left side of the circle is Winnunga Nimmityjah AHS, while the right is the broader community seen as external to the service. The innermost circle includes: a GP, an outreach member of the Social and Emotional Wellbeing team, a nurse, two receptionists and a medical specialist. The patient was not able to articulate the strength of the relationships between these staff members, but this did not seem to matter as they trusted the organisation and their outcomes were positive.
In Figure 10, the patient defined the innermost circle of health care workers in the service as “people I would have coffee with”, indicating the cross-over in an integrated service between caregivers and “family”. Only one close to the patient (ego) is the specialist doctor at Winnunga Nimmityjah AHS, with other support nodes (alters) arrayed further from the centre. Despite having multiple illnesses that cause the person to attend hospital, they are able to list many more people within Winnunga Nimmityjah AHS—the service who support their health—than outside the service. The patient also included a friend as an integral part of their health care team.
Notably, patient support networks often included reception staff (n=12), who featured as frequently as GPs (n=13) and nurses (n=12). There are more of these three types of nodes than there are respondents (n=9), suggesting that many patients have more than one of these team members in their network. Detail of the makeup of networks by discipline is included in Table 2. The mean size of patient ego networks for Winnunga Nimmityjah AHS patients in this study (n=9) is 10.33 (range 3-16, SD 4.55), meaning that the average patient identified around ten people in their individual health support network.

Nodes in each patient network (alters) were also allocated a proximity score based on their closeness to the ego as indicated by patients using the egonet diagrams. Scores ranged from one (distal) to nine (proximal). The mean proximity score for all alters in Winnunga Nimmityjah AHS patient networks was 7.19. The mean score by discipline or team is also indicated in Table 2.

<table>
<thead>
<tr>
<th>Team / discipline</th>
<th>N=</th>
<th>%</th>
<th>Mean proximity score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied health</td>
<td>4</td>
<td>4.3%</td>
<td>5.3</td>
</tr>
<tr>
<td>Bus driver</td>
<td>5</td>
<td>5.4%</td>
<td>7.2</td>
</tr>
<tr>
<td>Dental</td>
<td>4</td>
<td>4.3%</td>
<td>6.5</td>
</tr>
<tr>
<td>External</td>
<td>23</td>
<td>24.7%</td>
<td>6.3</td>
</tr>
<tr>
<td>Friend</td>
<td>2</td>
<td>2.2%</td>
<td>9</td>
</tr>
<tr>
<td>GP</td>
<td>13</td>
<td>14.0%</td>
<td>7.7</td>
</tr>
<tr>
<td>Nurse</td>
<td>12</td>
<td>12.9%</td>
<td>8.3</td>
</tr>
<tr>
<td>Psychologist</td>
<td>5</td>
<td>5.4%</td>
<td>6.6</td>
</tr>
<tr>
<td>Reception</td>
<td>12</td>
<td>12.9%</td>
<td>6.6</td>
</tr>
<tr>
<td>Social health</td>
<td>9</td>
<td>9.7%</td>
<td>7.2</td>
</tr>
<tr>
<td>Specialist doctor</td>
<td>4</td>
<td>4.3%</td>
<td>6.5</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100%</td>
<td>7.19</td>
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</table>

Participants were allowed to provide their own meaning for the ‘importance’ or ‘closeness’ of the alters. As a result, proximity is influenced by a number of factors including frequency of contact, the patient’s feelings towards the alter or the tone of the relationship, and perceived importance to outcomes. Friends were only identified by two participants; however, in both case these were located extremely close to the ego, indicating critical importance to patients. ‘Social’ supports often rated more strongly than ‘clinical’ supports for patients. For example, bus drivers, the social health team and reception staff all score consistently around seven which is higher than allied health and specialist services.

Patients appreciated when staff greeted them and asked them how they were going when they randomly encountered them, either in the waiting room or as they were walking to consultations.

On numerous occasions, clinical staff were observed interacting with individuals whom they had seen clinically in the past, asking how they were and checking they were making progress. In each instance, the encounter left the patient in a good mood as they appreciated the staff member going beyond their required duties, even just being recognised by the staff member was positive. This occurred in the waiting room, and in the corridors as a patient walked from a consult to leave (Observation Notes).

The reception staff were noted for their handling of situations where clients were irritated; they were commonly in the firing line when patients were angry or when administrative

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* One patient declined to complete the Egonet exercise
mistakes were made. The ability of the staff to manage these emergent angry moments affirmed the patients’ assurance that they would be recognized and responded to.

A patient was upset at not being able to receive the medication that she wanted. This occurred during the universal lunch break, and staff from across the disciplines were enjoying lunch together, discussing how to explain why people smoke to children. When it became clear that the disturbance would not be resolved quickly or easily, the staff silently looked around the room, appearing to communicate quietly. After a few moments, the most senior GP present went to investigate, and working in conjunction with the staff already present resolved the situation (Observation Notes).

External nodes are clearly important to patient networks even though their ‘proximity’ may not be high. This has important implications for co-location as a strategy. External nodes (including friends) figure in approximately 25% of patient networks despite the fact that Winnunga Nimmityjah AHS can be described as a service with many co-located disciplines, where one might expect most of the connections to be internal. While co-location is clearly useful and desirable to patients, there will probably always be external nodes that need to be engaged on behalf of individual patients if their needs are to be properly met.

Only the services like I see my oncologist, my specialist for me heart and my surgeon, you know, that’s once a year… All the medical information I get from them other doctors comes to Winnunga Nimmityjah AHS because they work in with each other, with my doctor, yeah. (Patient Interview # 8)

Among interviewees, there was varied understanding of how Winnunga Nimmityjah AHS functioned as an integrated service. All respondents reported that the staff work as a team: some provided specific examples of when this happened; while others said that they just knew that was how it was.

CASE STUDY 2: Companion House Refugee Service

Companion House (CH) was established in 1989 when some key Canberra residents, associated with Amnesty International, identified the need for the service and developed it as a shoestring enterprise. The service operated from a small building in Inner North Canberra where the staff were in close communication simply because of the crowded structure of the building and its poor soundproofing. It has subsequently moved to a retrofitted, decommissioned school building. This physical environment provides more space but potentially more risk of the teams separating into their own domains.

The primary focus of the initial service was social and psychological support for refugees after resettlement; however, a voluntary part time doctor also provided medical services. In 1995, the ACT Government ceased employing doctors in community health centres but funded a doctor part time to attend Companion House.

Companion House has five teams: counselling, community development, education and outreach, advocacy, and medical.

The medical service has grown from a small, part-time clinic providing two sessions per week, to the team that manages the largest number of clients at Companion House. Numerically, the counselling team has the highest number of staff in the service.

I guess Companion House was always different because we were in the small context and because we grafted things onto it, which includes the most important one… because really, it’s the biggest part of the services… is the medical service, but also, migration support and various other things over the
years. Being in a small context has meant that we do a broader range of things naturally, I think (Oral history).

Companion House’s medical service is a transitional rather than a parallel service. Its long-term aim is to move patients, after the initial management and catch-up primary health care, into mainstream medical services. A considerable amount of effort is therefore devoted by all team members in Companion House to developing the capacity of the community to provide services for refugees.

The Companion House philosophy (Box 2) is prominently displayed at Companion House. The medical service does not have a corresponding articulated philosophy. In keeping with the overarching service philosophy, the principle of equivalence applies—that is, that everyone warrants access to equivalent services, regardless of their ability to pay, as a human right. The Universal Declaration of Human Rights is also displayed on the wall of the waiting room, passively reminding patients, staff and visitors of the origins of the organisation and its commitment to individuals and communities.

**COMPANION HOUSE PHILOSOPHY**

Companion House endeavours to provide services that respect, support, and empower survivors of torture and trauma who have sought refuge in Australia, promoting safety, healing, and companionship throughout the settlement journey.

**Box 2: Companion House philosophy.**

*Source: Companion House website, [www.companionhouse.org.au](http://www.companionhouse.org.au)*

**Space**

The wide corridors of Companion House betray its origins as a public school. The couch-lined walls in the main thoroughfare are central spaces for patients who sometimes come and spend the day talking to other patients. The spatial layout is well-understood by all patients, who could even identify the spaces used by occasional sessional migration agents—a reflection of the small size of the service.

Certain spaces within the building allow for different types of communication between staff. The tea room, staff room and photocopying area were described by all interviewed staff (and other staff who approached the researcher during their visits to the centre) as important social spaces where informal communication between teams occurs. Formal spaces, such as the nurses’ space, provide unique support for staff.

> It’s a very calm space [the nurses’ area]. I always say they’re like the little bit of sanity and so it’s almost is good if they’re a bit separated off… that they are separated off. It is a very kind of calm, sane space. And the rest of us are running around out there, ‘Ahhh!’ (Oral history, CEO).

Here, a formal work space is used informally by staff from other areas to share emotions and shelter from the sometimes stressful environment outside.

**Commitment to organisational ethos**

The organisational ethos of Companion House includes mutual respect. Staff members who prefer to work independently have in the past been asked to leave. Staff members who are employed at Companion House reiterate their commitment to the values of the service on a daily basis, and use this to ensure their resilience through more difficult times.

When discussing the mission of the organisation, most staff mentioned a commitment to universal human rights and agreed that an ethos did exist and was shared.
I think that's one of the strongest things, Companion House, is that there's a very strong shared purpose... Our shared purpose is to make sure that these people who are the most marginalised people have the best possible care, that we do what we can for them, at all times. And that we don't turn somebody away (Staff Interview #3).

Many staff also described their passion for their work, and the passion of their colleagues,

You wouldn't really last in a place like Companion House unless you were committed and passionate about the work (Staff Interviews #2).

Communication

Most staff said that their primary mode of communication was informal. Interviewees did not mention the annual staff planning day and the documents that emerged from this, though several cross-team working parties were involved in developing these and they were widely disseminated among staff. This suggests that while formal communication does occur, staff members view themselves as communicating almost solely through informal means.

The ability of staff to informally communicate with one another and with the clients is a design feature of the service. Some staff are employed to assist with informal communication because of their personal qualities such as being able to demonstrate empathy or be responsive to complex needs while not being overwhelmed. These staff members often spent more time in central areas such as reception where they were able to talk to all staff.

Although many of the staff work part time, and are often off-site doing outreach work, the open social spaces of the service make it easy to informally communicate with another staff member, or a patient, or to find a spare room to have a more confidential conversation.

If somebody sort of has a rough session they go around and they find somebody else whose door is open. Like if I'm not in a session I leave my door open, and anybody can come in and it's fine (Staff interview # 5).

Social networks and communication

The apparent importance of informal communication mechanisms was supported by the SNA. This analysis demonstrated that the informal network(s) within Companion House (n=28) was approximately twice as dense as the formal network, at high statistical significance (1.5 c.f. 0.7, p <0.00005) (see Figures 12 and 13).

In these diagrams, each coloured square represents an individual staff member (or node), while each colour represents a team or unit within Companion House (administration, allied health and nursing, medical, counselling, community development). Lines between...
nodes indicate a relationship, and nodes are positioned consistently to enable comparison.

This finding suggests that informal mechanisms may be more influential than formal processes and structures in problem solving interactions between staff within the organisation. However, this finding may have been influenced by staff discussion leading up to the study. Staff reached some level of consensus regarding whether or not their communication was formal or informal. In addition, during brief discussions with the researcher when returning the completed questionnaire, most staff noted that informal communication is more important.

The six most highly connected individuals within each network type at Companion House are listed in Table 3 (in rank order of centrality).

Table 3: Node centrality scores by network type

<table>
<thead>
<tr>
<th>FORMAL</th>
<th>INFORMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH14</td>
<td>7.82</td>
</tr>
<tr>
<td>CH5</td>
<td>7.77</td>
</tr>
<tr>
<td>CH20</td>
<td>7.73</td>
</tr>
<tr>
<td>CH18</td>
<td>7.62</td>
</tr>
<tr>
<td>CH17</td>
<td>7.19</td>
</tr>
<tr>
<td>CH16</td>
<td>6.92</td>
</tr>
</tbody>
</table>

(NB: Node centrality scores reflect the ‘connectedness’ and ‘influence’ of individuals or ‘nodes’ in each network. This analysis dichotomises the data—so reflects the size and shape of networks but NOT the frequency measures)

The two most prominently connected individuals in the formal network (CH14, CH5) are also highly influential informally. Again, there are some individuals who figure more prominently in either formal or informal networks.

The CEO was one of the most central individuals in the informal network, but does not figure prominently in the formal network. This is a potentially surprising finding given the structural prominence of this role and the expectation that it may figure prominently in the formal rather than informal network. Individual leadership style may have contributed to this result, along with the relatively small size of the organisation and the clear preference of the service for operating through informal links. The accessibility of the CEO was also frequently noted in the patient focus groups, and all staff mentioned in their interviews that the horizontal organisational structure and the CEO’s open-door policy were strengths of the organisation and influenced how others performed their tasks.

There is no particular relationship between centrality and individual roles or teams at the informal level, which may be more a function of personality or professional style than role. However, there may be a link between the counselling team and centrality within the formal network: four of the six highly central figures here are members of the counselling team.

Team is weakly to moderately associated with density at CH (formal 0.304; informal 0.319), where network density was highest for members of the allied health/nursing and counselling teams across both formal and informal networks (see Table 4).

Table 4: Network density scores (in effect the proportion of possible ties) by team

<table>
<thead>
<tr>
<th>Team</th>
<th>Density score (Std Dev)</th>
</tr>
</thead>
</table>

*Node centrality scores reflect the ‘connectedness’ and ‘influence’ of individuals or ‘nodes’ in each network. This analysis dichotomises the data—so reflects the size and shape of networks but NOT the frequency measures*
<table>
<thead>
<tr>
<th>Team</th>
<th>FORMAL (ac=0.304)</th>
<th>INFORMAL (ac=0.319)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin / Management</td>
<td>0.674 (0.989)</td>
<td>1.506 (1.279)</td>
</tr>
<tr>
<td>Allied health / Nursing</td>
<td>0.948 (0.943)</td>
<td>1.878 (1.096)</td>
</tr>
<tr>
<td>GPs</td>
<td>0.291 (0.532)</td>
<td>1.259 (1.093)</td>
</tr>
<tr>
<td>Counselling</td>
<td>1.019 (0.808)</td>
<td>1.981 (1.012)</td>
</tr>
<tr>
<td>Complementary Rx</td>
<td>0.315 (0.474)</td>
<td>0.630 (0.765)</td>
</tr>
<tr>
<td>Community Development</td>
<td>0.781 (0.912)</td>
<td>1.081 (1.053)</td>
</tr>
</tbody>
</table>

\( ac = \text{autocorrelation}^\text{vii} \)

The medical team, on the other hand, has particularly low density scores within the formal network but becomes substantially more influential within the informal network. This differential may reflect the historical evolution and service ethos of Companion House. These shifts are illustrated in Figures 14 and 15, where the movement of the CEO (CH1) from the periphery of the formal network to the core of the informal network is also evident.

While informal communication is a strong feature of organisational relationships at Companion House, this coexists with an evolving formal system of communication. During the project period, a formal process of meetings, at which annual plans were articulated and agreed, was taking place. The policies and protocols which underpin the service are regarded by staff as living documents, and staff are engaged in their development. This formal communication provided a way for staff to explicitly commit to the overarching mission and organisational ethos of the service.

*Figure 14: Formal problem-solving network  Figure 15: Informal problem-solving network*

These diagrams display the same networks as Figures 12 & 13, but in this case, are centred on the most connected nodes in each network. Consequently, nodes may shift position between diagrams.

The formal communication structure is not antecedent to, or more important than, the informal communication structure. The two appear to be co-evolutionary systems that have become more elaborate in response to staff, clients and service stress. In the preceding few years, the counselling and medical team workloads have increased in complexity and stress concurrently with the increase of long-term asylum seekers with few social supports. Below,

\[\text{vii} \] An auto-correlation procedure is the easiest way to look for correlations in the network data matrix. UciNet performs an auto-correlation based on a random number of auto-generated permutations. The routine is similar to performing a standard chi square test except instead of using the chi squared distribution the underlying distribution is constructed using a randomisation procedure.
an interviewee discusses the interweaving of formal with informal communication to enhance staff resilience,

The counselling team meets once a fortnight, we all get external clinical supervision by different supervisors that we deem to be suitable, and also that Companion House deems to be suitable. We also will have internal supervision by the team leader. Then we meet formally as a team, well formally, once a fortnight, and the purposes of our team meetings are diverse, you know sharing information, getting updated information on things that are important, complex case analysis… reading interesting articles and discussing them, so sort of internal sort of professional development….But also just particularly in the last couple of years when it’s all going, you know it’s all so awful, [we] just debrief, we’ve done really quite a lot of just debriefing at team meetings (Staff interview #4).

Similar informal-on-formal support had also been established for the medical team, in response to increase in similar stressors.

That's a lot more emotion than in the average general practice I would say. And it's wide ranging. I think at the moment, the dominant thought is about a lot of our [asylum seeker] lads being sent back...So there's been a lot of discussion going on between us all because of that. But I think we were also feeling it's going to be really hard, we've known these guys for a few years, knowing they're going to be sent back (Staff interview #3).

This dynamic, organic combination of formal and informal processes has enabled the emergence of a form of patient focused, needs-based integration rather than a prospective, objectified form of clinical integration which is often at the heart of efforts to seek or create integrated services. While being emergent rather than produced, this integration entity functions as both process and outcome.

**Flexibility and fuzzy boundaries**

Companion House has a flat management structure. The management group supports other staff members to have a turn at leading the service on a relieving basis, irrespective of seniority. Reception work is considered so important to the ‘face’ of the service that there is no designated receptionist. Instead, staff members, apart from the sessional doctors, take turns working on reception. Sharing the reception role means that all staff members have immediate experience of the needs of patients and, from the patients’ perspective, opens up the service as there is no gatekeeper.

Although there are team and whole-of-staff meetings, CH does not have regular cross-team meetings. Teams themselves are primarily linked through team leaders who collaborate and through cross-over roles. A nurse from the medical team, for example, spends part of the week in the community development team. The advocacy team includes a staff member who has worked for years as a senior member of the counselling team.

The beauty of this integration system [is] we all have an open kind of dialogue, we can talk to the Director, we can talk to the team leader on different aspects of issues and of course no one or none of the team can do everything, that’s why we have to cross manage the issues to some extent but not all the time…. I never see our Director put up a flow chart, "I’m here, you’re here". But the structure we’ve got here is very flexible as it practically functions and …you can call the team leader as well as other workers when you need to talk and there’s something to be managed (Staff interview #2).

At the time of the study there were also ten working parties comprising members from different teams, developing and implementing approaches to emergent issues from research
priorities to children’s needs. These groups meet irregularly and also provide linkage across teams.

This fluid approach to collaboration has generated a collective sense-making and pragmatic problem-solving orientation that serves Companion House well in times of adversity or crisis. Two salient challenges faced during the course of this study were a decrease in funding relative to needs, and an increase in the social and psychological needs of groups of asylum seekers. In the following passage, a staff member describes the collective generation (or ownership) of a solution to the funding shortfall,

The difficulties we’ve gone through this year have been worked out amicably. People have been asked if they’d be prepared to take a drop in the number of hours they work, so that we could keep other people. People chatted to one another and went, “Oh well, this is what we’ve got to do” (Staff interview #4).

Not all boundaries at Companion House are fluid. Some boundaries between clinical disciplines are consciously reinforced. The medical and nursing staff belong to the one team, and are separated practically and functionally from the counselling team. The counselling team keeps separate notes that are not accessible to the medical team. Before the teams communicate about a patient, explicit permission is sought from the patient. On other occasions, staff decide not to share patient information, in the interests of both patients and staff cohesion. The default position, whether or not permission is given to communicate across teams, is boundary observance between the counselling and medical teams.

The most obvious service-related reason [for not emphasising clinical integration] is that we’re working with different family members, so if you had a case conference about a family where there’s a conflict, everyone will line up with their client or their patient and that’s just how it always has been and you can end up with a lot of fracturing. Even the counsellors don’t meet if they’re working with different members of a conflicted family. We would put a barrier down there because they will fight just like the family. There’s no way out of it. You can’t escape it ‘cause you’ve just got such different perspectives (Staff interview # 6).

This disciplinary boundary separation did not exist between nurses and doctors in the medical team. Nurses work to the same protocols as doctors, and a series of standing orders means that they can function independently as clinicians. For example, their triage function in a busy clinical service was very important, and doctors trusted that nurses were able to do this well. In the following quote, a doctor describes an evolving web of interconnectedness between the disciplines in the medical team, commenting on the centrality of a non-clinical worker, even while reinforcing boundaries to their role.

[What happens is] there are little reaching outs going on all over the place like a spider web. So often the nurses are going to be a bit of the lynch pin, now the interesting thing for them of course, is they’re all part time too. So interestingly, sometimes Julia [administrative worker], who’s not medical or nursing, is a very important person. While she doesn’t know those medical and nursing details, and is very appropriately out of that, there’s a lot of other stuff going on that clients, patients tell her…so she’s a very, very integral part of the team (name changed, Staff interview # 3).

Although clinical interaction between the medical and counselling teams was formalised and conscious of disciplinary boundaries, the two teams frequently collaborated under the guidance of the advocacy team to assist with social needs of patients. This combination of formal and informal structural elements, with both fluid and concrete boundaries has created a service environment where clinical teams are collectively oriented towards patients but not necessarily towards each other. They are in parallel alignment with a common or shared objective rather than focused on or directed towards one another. In effect, Companion
House is integrated at the organisational, service and functional levels, while not being 'clinically integrated' in the usual sense or exhibiting formal integration between clinical teams.

The patient's perspective

Patient participants at Companion House expressed confidence in the responsiveness of the service to their needs. The concepts of family and home were raised by patients as a way of presenting their impressions of the service.

Interestingly, the service’s practice of providing some protective barriers between the service teams was not always appreciated by patients. When asked explicitly to identify ways to improve the service, a few patients nominated clinical integration. “It would be good if we could see the doctors and the counsellor together,” said a spokesperson for one group, describing as frustrating the need to move between two clinician groups and tell their story again.

In annotating maps of the service, patients identified and often personalised the space, even identifying key areas by name of the staff members most often seen there. For example, some respondents nominated the location of the migration agent who visits Companion House occasionally but was clearly key to their holistic perspective of the service.

This perspective was reiterated in some of the egonet diagrams such as Figure 16, where the patient lists members of the medical team, and the “lawyer” (i.e., the migration agent) as innermost members of their health team.

Patient support networks most frequently included GPs (n=35) and reception staff (n=30), followed by external nodes (n=21). The frequency of these node types relative to respondents (n=22) suggests that, again, many patients include several GPs or reception staff in their network. Network configuration by discipline is detailed in Table 5.

![Figure 16: Patient egonet showing most important health network members](image-url)
The mean size of patient ego networks for Companion House patients in this study (n=21) is 6.76 (range 1-13, SD 3.39), meaning that the average patient identified just under seven people in their individual health support network.

Table 5: Companion House egonet configuration by discipline

<table>
<thead>
<tr>
<th>Team / discipline</th>
<th>N</th>
<th>%</th>
<th>Mean proximity score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community development</td>
<td>11</td>
<td>7.6%</td>
<td>7.9</td>
</tr>
<tr>
<td>Complementary therapy</td>
<td>1</td>
<td>0.7%</td>
<td>7.0</td>
</tr>
<tr>
<td>External</td>
<td>21</td>
<td>14.5%</td>
<td>6.6</td>
</tr>
<tr>
<td>GP</td>
<td>35</td>
<td>24.1%</td>
<td>8.5</td>
</tr>
<tr>
<td>Management</td>
<td>11</td>
<td>7.6%</td>
<td>7.5</td>
</tr>
<tr>
<td>Nurse</td>
<td>14</td>
<td>9.7%</td>
<td>8.4</td>
</tr>
<tr>
<td>Psychologist / Counsellor</td>
<td>11</td>
<td>7.6%</td>
<td>7.6</td>
</tr>
<tr>
<td>Reception</td>
<td>30</td>
<td>20.7%</td>
<td>8.1</td>
</tr>
<tr>
<td>Other support staff</td>
<td>10</td>
<td>6.9%</td>
<td>7.9</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td>100%</td>
<td>8.03</td>
</tr>
</tbody>
</table>

Nodes in each patient network (alters) were also allocated a proximity score based on their closeness to the ego as indicated by patients using the egonet diagrams. Scores ranged from 1 (distal) to 9 (proximal). Participants were allowed to provide their own meaning for the ‘importance’ or ‘closeness’ of the alters. As a result, proximity is influenced by a number of factors including frequency of contact, the patient's feelings towards the alter or the tone of the relationship, and perceived importance to outcomes. The mean proximity score for all alters in Companion House patient networks was 8.03. The mean score by discipline or team is also indicated in Table 5.

The highest proximity scores were allocated to GPs and nurses, followed by reception staff, although mean score across all teams tended to be high. In general, internal nodes were seen as more important by patients than external nodes.

Patient engagement with space

Focus Group participants were provided with a floor plan of Companion House and asked to indicate the spaces that were important to them. Based on the services that were used and how long they had been coming to Companion House, patients identified very different spaces. Every room and corridor was identified by at least one patient, with some labelling the service or the person that they identified with the space (see Figure 17).
Figure 17: An example of a patient map of CHMS

The two most frequently noted areas were the nurse room (16/22) and the front reception (11/22). The nursing area is significant as it is the first space where new patients receive their initial consult and is often where they head when arriving on follow up visits. The reception desk is also important as the rotating shifts allow patients to meet staff from areas they may not otherwise encounter.

Interestingly, no patients identified any of the outside spaces as important, despite many children using the playground outside, and many community events, including the focus groups, being held in the adjacent hall. This may be due to the sense of ownership that the patients of Companion House have over the service. Many noted in the focus group that it is more like a family for them.

This sense of family presents certain problems for Companion House as it transitions patients to mainstream services. The CEO noted in the Oral History that the line between patient and friend is a difficult one to draw; encouraging positive feelings towards the service encourages patients to feel comfortable using the service when they might otherwise avoid a visit, but overstepping this boundary can undermine the goal of transitioning patients.
Discussion

Both Winnunga Nimmityjah AHS and Companion House originally operated out of the same ACT Government-funded community centre in Canberra’s CBD. Like Winnunga Nimmityjah AHS, medical services at Companion House were initially provided by a very part-time doctor; although in the case of Companion House, this doctor was a volunteer. Unlike Winnunga Nimmityjah AHS, the primary focus of Companion House was not the delivery of medical services. In addition, medical services at Companion House are provided as a transitional, rather than parallel, service.

Despite clear differences in size, target population and service orientation there are a number of emergent similarities that suggest themes and principles for understanding integration of care.

INTEGRATION FROM WITHIN

Neither Winnunga Nimmityjah AHS nor Companion House defined what they did through the prism of integration. Integration was instead a route towards effective service delivery and maintaining organisational strength. Each service demonstrated that it is possible to be integrated even without clinical integration if measures are made to ensure there is organisational and functional integration. From the patient’s perspective, an integrated health service seems like a reliable service that ‘recognises’ the individual patient in their social context. From the staff members’ perspective, integration is something aspirational, which is achieved partly through constant striving. It is not a linear progression, but fluctuates between more and less integrated. It is certainly not something to be taken for granted, and indeed can be threatened during times when service load becomes excessive or services undergo expansion.

In both services, integration is understood as an emergent and ideal property to be strived for or worked towards, rather than something to be executed as process or structured into health care work. A dynamic, organic combination of formal and informal processes has enabled the emergence of a form of patient focused, needs-based integration rather than a prospective, objectified form of clinical integration which is often at the heart of efforts to seek or create integrated services. While being emergent rather than produced, this integration entity functions as both process and outcome.

SPACE

The nature of physical space has important implications for integration in that constraints can serve to force closeness and collaboration between clinicians, while impeding other functions. Both organisations were able to reflect on the benefits of small spaces as well as the benefits of larger spaces. Space can also transmute as ‘openness’ for patients and may be instrumental in influencing the sense of community or belonging related to a service.

ORGANISATIONAL ETHOS

Staff at both Winnunga Nimmityjah AHS and Companion House clearly articulated their philosophical commitment to the service and the resulting primacy of a unified and shared purpose. Many reiterated their commitment to the values of the service at interview and described ways that this occurred on a daily basis, also functioning to ensure their resilience through more difficult times.

The organisational ethos is instantiated by staff members through commitment to the clients’ access to health care. Both services view integration as a way of driving and centralising the candidacy of patients. Candidacy, as defined by Dixon-Woods et al,
describes the ways in which people’s eligibility for medical attention and intervention is jointly negotiated between individuals and health services. Candidacy is a dynamic and contingent process, constantly being defined and redefined through interactions between individuals and professionals, and in the context of operating conditions, including the biography of the relationship between patients and staff, the typifications staff use in categorising people and diseases, availability of resources, local pressures, and policy imperatives (p 85).43

This focus on patients of the service as the primary raison d’être is a key enabler of the emergent organic integration of care that we observed.

COMMUNICATION

Communication is a critical enabler of integration and where gaps in formal communication structures are perceived, informal solutions often arise. Even in the presence of formal mechanisms, informal communication is likely to occur. However, neither is necessarily superior to the other, and they function side by side.

Informal communication networks play a key role in problem solving to achieve integration of care in both organisations. These may be as important as formally constructed networks dictated by roles or organisational structure. At Companion House, these informal networks are particularly critical. However, leading up to the study, staff at Companion House acknowledged discussing whether or not their communication was formal or informal and seemed to reach some level of consensus, which may have influenced the results. It is not known whether similar conversations occurred at Winnunga Nimmityjah AHS.

While some individuals are central to both forms of network, other individuals will be prominent in either formal or informal systems. This may reflect a range of factors including personality, professional style, role, or organisational orientation.

Staff at Winnunga Nimmityjah AHS tended to have larger networks than individuals in Companion House, but this can be a function of organisational size (i.e., there are more people in the organisation to have ties with). After adjusting for organisational size, Companion House exhibited a higher network density than Winnunga Nimmityjah AHS (0.505 c.f. 0.343, p=0.0115).

FIRM AND FUZZY BOUNDARIES

Staff in both organisations described the importance of role flexibility and fluid boundaries across teams. Often this was overlaid on a sense of underlying clarity and firmness of structure. This dual approach, which provides certainty but enables responsiveness, mirrors the dual nature of informal communication layered on formal structures and allows for the development of shared responsibility alongside shared purpose.

INTEGRATION FOR PATIENTS

Patients of both services expressed that integration feels like home and family. This shared sense points to the importance of ‘belonging’ for patients, and the sense of assurance that their needs will be recognized, acknowledged and met. In both cases, the service acted to integrate the health and social spaces for patients, and social supports were often highly important to patients in the networks they perceived and constructed for managing their own health. For example, bus drivers, community development workers, the social health team and support services all scored consistently highly.

Like staff networks, patient networks at Companion House tend to be smaller and closer than those at Winnunga Nimmityjah AHS. Differences in both mean size (p=0.024) and density (p= 0.018) between the two services are statistically significant, but this may simply
reflect legitimate organisational and population differences. Winnunga Nimmityjah AHS is a substantially larger organisation and the opportunity for larger networks may simply be greater, while the nature and complexity of patient needs is clearly different.

Across both services, the groups that occur most frequently in patient networks are GPs (n=48), external nodes (n=44) and reception staff (n=42). These node types outnumber respondents (n=30), suggesting that many patients have more than one of these team members in their individual networks. In terms of proximity, or patient-rated ‘importance’ within networks, the groups that score highest are GPs, nurses and friends. Reception staff are also key personnel. While their mean proximity score is mid-range, they figure frequently in patient networks and often score very highly. This suggests that while there is considerable variability, they play a critical role in integration of care for patients.

External services are also important for patients, constituting around 25% of Winnunga Nimmityjah AHS patient networks and 15% of those at Companion House. This occurs despite the fact that both organisations, and Winnunga Nimmityjah AHS in particular, have strived to provide co-located services. While co-location is clearly useful and desirable to patients, there will probably always be external nodes that need to be engaged on behalf of individual patients if their needs are to be properly met. Co-location however, is an important enabler of informal communication mechanisms.

SOCIAL AND ORGANISATIONAL ATTRIBUTES OF SUSTAINABLE INTERDISCIPLINARY WORK

Both Winnunga Nimmityjah AHS and Companion House have demonstrated sustainability through many upheavals over 25 years. Social attributes include,

> commitment to the ethos of the service. Staff members in Winnunga Nimmityjah AHS are committed to Indigenous ownership and determination, Companion House to holistic support of asylum seekers and refugees. Both of these positions have political dimensions in that they are aware of the body politic in which patients exist and that their positions as legitimate candidates within the health sector may be threatened.

> commitment to the candidacy of patients. In both facilities, patients viewed the service as utterly supportive with features consistent with family or home. This perspective was also described by staff members in quite specific ways.

> commitment to one’s own team, but awareness of boundary blurring. The importance of knowing one’s own roles and responsibilities was held to be central at Companion House in staff interviews, despite the fact that this service had a lot of role crossover. In Winnunga Nimmityjah AHS, there was a move towards developing better clarification of roles to improve integration across the service levels. Both services described a great deal of coherence and emotional support within their teams.

The organisational attributes include physical co-location. However, both these case studies demonstrate that co-location is an enabler, but not of itself a sufficient driver, of integration.

All of the commitments noted above are social attributes that may have been lost if the services were in a more diffuse environment. In one building, the layout was so linear that patients could correctly mark out the private spaces of clinicians (such as where the tea-rooms were) and were on occasion able to identify the rooms that were multi-purposed. In another building, the backroom spaces were less clear to patients, but they still regarded the spaces as open.

Leadership in both services was a critical organisational attribute. Though both services had different models of leadership—partly reflecting their different positions on a continuum of
service evolution—staff and patients both recognised the level of leadership that ran through the team and the service overall. Unanticipated changes in policy, or in the social circumstances of client groups, can have big impacts on both services within, and leadership is needed to drive this. Leaders in both services have attempted to set up organisational shock-absorbers, such as back-up leaders, and appointing key people to act as central foci to integrate across the teams. The success of these appointments is indicated by the fact that they emerge as central in both formal and informal networks in both services.

Interestingly, communication technology was not a key feature of integration. This suggests that clinical integration requires human interaction in addition; or that the formal technology is geared to the relationship between the individual patient and clinician, rather than being able to drive clinical integration.

HOW DO WE KNOW WE’RE INTEGRATED?
DEVELOPING INDICATORS

Developing candidate indicators for complex phenomena such as integration poses many challenges. The case studies presented within this report indicate that an integrated health service may have imperfectly integrated clinical services—something which seems inimical to good integration. Thus, indicators for integration need to incorporate other modes of integration beyond clinical integration, such as organisational, functional and service levels of organisation.

From the patient’s perspective, integration offers reassurance that they are recognised in that their candidacy will be defended by the service. Patients readily identify teams of significance to them. This has the effect of mitigating the impact of some of the health workers that they may not like while recognising they these less preferred workers still contribute to their care. One person located some members of their health care at the edges of the paper on which the egonet was printed, well outside its margins—but the fact that their primary care team was well populated with people close to them meant that they felt protected and supported.

Potential indicator questions for patients’ experience of integration include,

> Can patients identify a range of people in different, relevant disciplines within the service that they could expect to solve a health problem?
> Can a patient feel confident that his or her health problem would be advocated for them in and outside the service by staff in the health service?

Potential indicator questions for clinical and service integration include,

> Can staff members identify their own roles and responsibilities in relation to others?
> Can staff members articulate the core principles of the service?
> Are management and staff confident that adherence to the core principles are shared across the service?
> Can staff members identify informal and formal mechanisms of solving a clinical problem within the service and how to use them?

Potential indicator questions from an organisational perspective include,

> Are there identifiable points and strategies that link different teams to enable easy communication between them?
> Does the co-located space allow both formal and informal communication between staff members, and between staff and patients?
> Is the communication system effective in allowing formal and informal integration?
> Is the ability to drive integration within the organisation considered when appointing staff?
Conclusion

This study sought to explore characteristics of both a mature integrated Aboriginal Community Controlled Health Service, and a rapidly expanding Integrated Primary Health Centre that supports refugees and asylum seekers. Both services are award-winning organisations with in-house GPs as well as more generalised health services to members of their local community. Both organisations are important community hubs and have needed to adapt to shifting community needs and environmental complexity, while developing and maintaining integrated services for clients.

From our study of these two services, we can determine the core attributes that have contributed to successful integration in each over time:

- **Shared commitment.** Staff members in both services are strongly committed to the ethos of the service: to Indigenous ownership; or to holistic support of asylum seekers and refugees. This provides a unifying element that binds staff together and directs focus towards patients.

- **A sense of belonging.** For patients, an integrated service feels like home or family and is viewed as being utterly supportive in that it can be relied upon to meet their needs. Staff demonstrate a reciprocal commitment to the candidacy of clients, recognising the socio-political dimensions of the body politic in which they reside and that their position as legitimate candidates within the health sector may be threatened.

- **Firm but fuzzy boundaries.** This was operationalized as underlying clarity with a latent flexibility that encompassed commitment to one’s own role or team, but enabled selective blurring of boundaries. Both services described a great deal of coherence and emotional support within their teams.

- **Strong informal interaction systems.** Informal communication networks play a key role in problem solving to achieve integration of care in both organisations. These networks may be as important as formally constructed networks dictated by roles or organisational structure. Co-location operates as an enabler, but not a sufficient driver, of integration. This may occur, in part, through the way co-location facilitates informal interaction.

These attributes give rise to an emergent, organic form of patient focused, needs based integration rather than the prospective, objectified form of clinical integration which is often at the heart of efforts to seek or create integrated services. It is aspirational rather than structural.

As trials of the Health Care Home model continue, it is important that the drivers of integration are understood and actively supported.

Policy makers should support the trialling of quality indicators of integration, including those for patients, to enable further operationalisation of the drivers of good integration.

Health care managers should focus on supporting communication-rich environments through ensuring opportunities and spaces for informal communication, as well as formal communication. This needs to be embedded in a culture of communication and collaboration which focuses on the patient’s needs as the purpose of integration, rather than service efficiencies—although our evidence suggests that informal communication is likely to be a highly efficient problem-solving mechanism. Effective clinical integration appears to involve both clearly elaborated role and team boundaries, and acceptance of the need to blur boundaries to meet patient needs in a considered and collaborative fashion.

At the consumer level, staff will need to be patient with the patients as they learn how integrated health services interact for them and around them.
References


Appendix A – Interview Schedules

INDICATIVE INTERVIEW QUESTIONS USED IN STAFF INTERVIEWS ON THE EXPERIENCE OF INTEGRATION

i. Working together
   1. Where is the initial point of entry for people coming into your service? [one or many?]
   2. What happens after someone is referred into your service?
   4. When a number of people are engaged in patient care, who coordinates their care?
   5. Have you ever felt that the team decision was the wrong one? In that case, how did you navigate this?
   6. What role does emotion play in the team that you have been a part of?
   7. What do you think ‘integration’ means in the context of a service like this? [Prompt: Is integration important? To whom? Why? How do you know if it exists? What makes it work? Is it something that you do, or is it something achieved for the patient?]
   8. How would you describe the integration of clinical teams / units within the Service? How has this evolved over time? What has driven this? What have the challenges been?
   9. Is there a shared sense of purpose or mission which encourages ‘integration’?

ii. Supporting working together
   10. Can you describe the structures that support people working together? [Information systems? Sharing physical spaces? Regular meetings addressing patients?] Do any of these get in the way of working together? [for example, IT systems that are not shared through the service?]
   11. Can you point out on this map the key areas where consultation between people occurs?

iii. Leadership
   12. Can you give me an example of positive leadership that you would see in this service?
   13. What was it about the style and approach to leadership that made this positive, in your view?
   14. Think back to when a positive change was made in any element of the organisation. Where did the leadership for this change come from?
iv. **Collaboration**

15. How have your external connections contributed to service delivery at Companion House?

16. Here are some values that are usually accorded to the concept of collaboration: (hand out cards marked: mutual trust, mutual respect, communication, shared goals for individual clients, knowing everyone’s roles and responsibilities, being willing to collaborate, sharing the service mission statement). Thinking about your own service, place these in order of importance for collaboration from most important or relevant to least.

**INDICATIVE QUESTIONS: PATIENT INTERVIEW**

**Part 1: History**

1. Can you tell me how long you’ve been coming to WNAMS/ CHRHS?
2. How did you first come to use the service? [Prompt: did you have a particular health issue? Were you referred to the service?]
3. Who was the first provider you saw?
4. Did you see any other providers on your first visit? Did you make arrangements to return after that visit?
5. Can you tell me the story of your health since that time? [Prompt: What has happened to your health since then?]
6. What providers do you see / services do you use now?

**Part 2: Emotional Response**

7. What do you like and dislike about the services available to you here? How do you feel about using the services?
8. What have been the best things for you about coming to WNAMS/ CHRHS?
9. Have you encountered problems with the way you have been able to access / use services over this time?

**Part 3: Integration**

10. Do you think of them as a team or a unit or do you see them as separate things?
11. How coordinated / integrated / connected do you feel the health care you receive is?
12. How important to you is it that they communicate well with each other? Do you think they do this well?
13. What else should they do together?
14. What do you want from your health care workers in terms of how they work together or relate to each other about you [or in general]?
Part 4: Formal/Informal

15. Do you feel that the staff have a stronger formal or informal relationships?
Appendix B – Social Network Questionnaire

This questionnaire elicits information about the networks people form to do their work. In the column on the left, please rate how often you would approach each of the people you work with to help you solve or manage problems related to the integration and coordination of care for patients with complex needs. On the right, please rate how often that person might approach you for the same purpose.

Please also think about whether you use formal or informal settings and mechanisms to do this. For example, a formal approach might be a scheduled meeting or communication over staff email. Informal mechanisms might include a brief chat in the corridor or in the break room over lunch.

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<th>FREQUENCY</th>
<th>YOU → THEM</th>
<th>PERSON</th>
<th>THEM → YOU</th>
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<td>How often do you seek them out to problem solve</td>
<td>Think about the way your interactions with this person work in general terms or most of the time. Please circle your own name and leave that row blank.</td>
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Are you willing to participate in a short follow-up interview about this survey?

Yes [ ] No [ ]