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## Briefing Paper 5: Data & Quality of Service

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This briefing paper summarises key findings from three rapid evidence reviews (*Transforming mental health services; International policy guidance and response to COVID recovery; International learnings on mental health plans, policies and implementation*) commissioned by the Mental Health Foundation to help support the development of Northern Ireland's ten year mental health strategy. It highlights **some of the national and international evidence**, offers examples of best practice and innovation and may be of interest to those responsible for developing the strategy. International best practice relies on informed, evidence-based treatment with the ability to assess need, monitor and evaluate treatment pathways, engagement and outcomes. Data modeling, good quality collection and data utility is the cornerstone of providing a high standard of care.

### Standards & Quality of Care

#### How well do we understand the mental health needs of our population?

- For the first time in Northern Ireland we have prevalence estimates of common mental disorders and other mental health problems for the 2-19 population, alongside data on a sample of over 2,800 parents (Bunting et al., 2020). This provides a firm basis for service planning and delivery.
- The case for a similar prevalence study of the adult population is compelling and in the current Mental Health Action plan Action 15.2 is to "Conduct a prevalence study for adult mental health" although it also states that this is subject to the costs being scoped.
- Evidence and learning from other countries have shown that having reliable prevalence rates can help transform services (see Australia for a positive example, summary available at <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary-of-mental-health-services-in-australia/prevalence-impact-and-burden>). The plan includes a new Intergenerational Health and Mental Health Study in 2021).
- Evidence suggests that building appropriate and sensitive mechanisms to collect high quality data alongside the ability to interrogate, monitor and model data can underpin intelligent, responsive and accountable healthcare systems.
- While further prevalence studies are recommended at relevant time intervals (e.g. Australia's last prevalence survey was conducted in 2013-14), building in good quality data collection and outcome measures can provide opportunities for ongoing information that can continue to inform and shape service planning, reduce waste, increase efficiencies and ultimately improve the effectiveness of care and treatment.
- We know that mental health conditions do not occur in isolation – mental disorders and chronic physical illness often are comorbid and the benefits of an integrated data system that connects health and social care gives the opportunity to assess, treat and monitor comorbid conditions.

### Transforming & future-proofing data systems

- Standardised regional data and reporting systems across services and Trusts will facilitate the portability of service user data across the region or when engaging with multiple services or agencies. This may assist in information gathering, reduce additional administration and support engagement at both individual/family and system level.
- Standardized systems also help protect staff time for therapeutic services and can reduce variation, omissions and hopefully reduce administrative workloads.
- Evidence also points to connected health and social care records facilitating more opportunities to screen, identify, treat and manage co-morbidities and help develop a holistic approach to providing support and care.
- Evidence suggests that dedicated resources and specialist expertise to maximize data can assist with planning, modelling, developing, and monitoring services and outcomes.
- An intelligent and responsive national data system could be used for regional, Trust-level, service-level use. The ongoing encompass initiative, which will introduce a standard, digital integrated care record across all Trusts in Northern Ireland, is a unique opportunity to ensure key mental health data is routinely collected.
- Having a system that is flexible enough to record different sources of data – mobile phone data, wearable and consumable devices (e.g. activity trackers, bed sensors) (Aledavood et al., 2017) could be extremely beneficial.
- Systems that are equipped to adapt quickly to new sources of data with minimal upfront costs are desirable. Data systems that collect raw data which is then refined and processed at a second stage, storing raw data at its lowest common denominator, is efficient to store and data can then be processed as appropriate.
- Opportunities to learn from high quality data systems will inform the planning and design of data requirements (e.g. Statistics Finland [https://www.stat.fi/index\\_en.html](https://www.stat.fi/index_en.html)).

### Outcome measures

A number of standardized instruments routinely form the basis of good quality data systems that can be used for screening, monitoring and measuring service effectiveness:

- Generalised Anxiety Disorder Questionnaire (GAD-7)
- Patient Health Questionnaire (PHQ-9)
- General Health Questionnaire (GHQ-12)

In the UK, there has been a concerted move by key funding bodies (including the Medical Research Council, National Institute for Health Research, SAMHSA) to standardise metrics when funding research (<https://www.linkedin.com/pulse/funders-agree-first-common-metrics-mental-health-science-wolpert/>).

There are a number of factors to consider in the selection of which combination of standardized instruments to use. These should include the outcome priorities of those who are using services, the acceptability of the instruments to service users and staff, how long they take to complete and whether they offer useful, direct comparison with other countries.

### The role of lived experience in the design, delivery and monitoring of services

- There are a wealth of good models and tools demonstrating how to incorporate co-production and lived experience to improve data and service quality. The Black Dog Institute in Australia has a wide range of accessible resources including a 'Framework for

the engagement of people with a lived experience in program implementation and research' (Suomi, Freeman, & Banfield, 2020).

**Figure 1:** Draft framework for engagement of people with lived experience (Suomi et al., 2020)

	Individual	Service/ program	Organisation	Policy/ strategy
Design	1. Shared decision-making	5. Co-design of services and programs	9. Advisory group, representatives in working groups	13. Co-design of policy/strategy
Governance/ Management	2. Treatment preferences	6. Reference groups Representatives on committees	10. Lived experience-led committees, equal representation in all decision-making bodies	
Delivery	3. Self-help programs/tools	7. Peer workers, peer-led programs	11. Lived Experience-led training for staff	14. Regular reviews of policy and its implementation by Lived Experience reps
Evaluation	4. Satisfaction surveys	8. Lived experience feedback, co-evaluation	12. Interviews with Lived Experience reps, regular audit of engagement activities	

### Service Quality

Research conducted by the King's Fund (Ross & Naylor, 2017) looked at quality improvement in three mental health organisations (2 in England, 1 in Singapore) and highlight some key insights and lessons:

- Quality improvement requires a change in the traditional approach to leadership at all levels in an organisation so that those closest to the problems (staff and patients) can help devise and implement the best solutions.
- Quality improvement at scale requires an appropriate organisational infrastructure to support frontline teams and ensure that learning is spread and taken up across the organisation.
- Tools and approaches in acute hospital settings can be adapted for community settings.
- Fidelity to the chosen improvement method and sustained commitment over time promotes success.
- A strong emphasis on co-production and service user involvement can be a powerful asset in quality improvement work.

### **Innovation & Research**

#### Increasing data utility

International evidence also suggests that once a high quality data collection system is developed, using it effectively is equally important. How health systems routinely gather data and how these are interrogated to inform planning, care and support varies widely. Agahi (2019) describes a project to integrate behavioural outcome measures (e.g. PHQ, GAD, AUDIT, Columbia Suicide Severity Rating Scale) with electronic health records (EHR) in Southern California. The main objectives of the project were to:

- Provide targeted care with a review of outcome measures with each visit and improve patient reported symptoms;
- Reduce documentation error through the use of automatically populating electronic health record treatment plans that use patient self-reported outcome measures;
- Provide a more accurate diagnosis;
- Provide more client centered treatment and engagement;
- Provide professional development opportunities for providers;
- Provide a large data set over an extended period of time to improve quality of care.

Using symptom rating scales, providers can detect patients who are not responding to treatment and face poor patient outcomes (Kennedy Forum, 2015). In a study by Bradshaw and colleagues (2014), it was noted that documentation error and lack of outcome measures in documentation not only impacts service implementation, but also led to significant trauma and fatalities among patients.

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