

Building a five-year vision for clinical analytics in NSW

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AGENCY FOR
**CLINICAL
INNOVATION**

Presentation outline

- Definitions
- Process to build the five-year vision
- Next steps

What do we mean by clinical analytics?

- **Clinical**
relates to the interactions between patients and providers
- **Data analytics**
relates to the automated processes enabling production of information from data
- **Clinical analytics relates to the automated processes enabling production of clinical information from data to support clinicians, patients or shared decisions**
 - Mobilises both data analytics and data analyses

Six stage process

Select
expert
panel

Pre-
meeting:
select
themes

Face to
face
workshop

Delphi
round 1 -
email

Delphi
round 2 –
real time

Final vision
statement

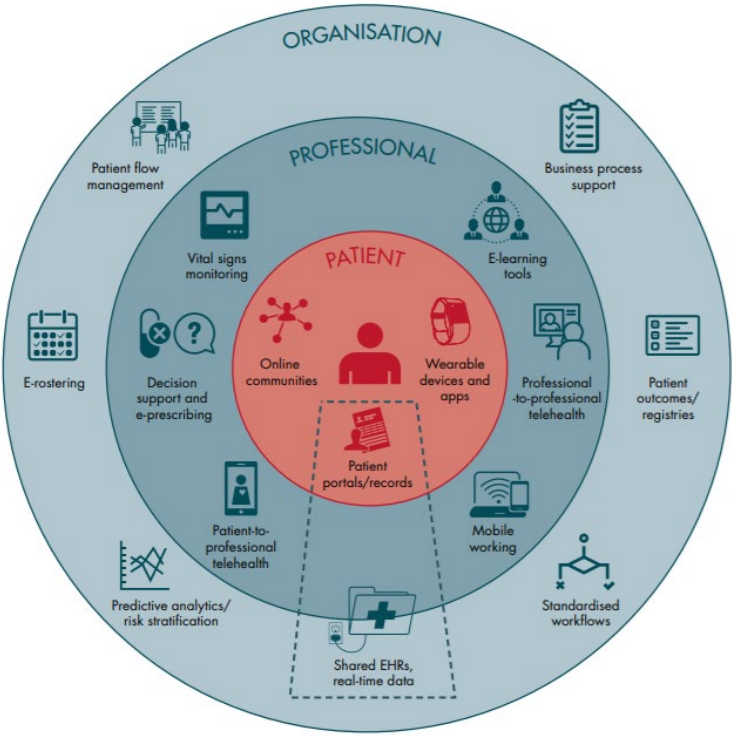
Participants

- Chief Nursing Information Officer
- Director Performance
- Clinical Advisor
- Postdoctoral Research Fellow
- Neurologist
- Associate Professor
- Cardiologist
- Director Performance Reports
- Senior Project Officer
- Chief Medical Information Officer
- Chief Executive
- RACMA Registrar
- Director Biomedical and Health Informatics
- Director of Clinical Governance & Information Services
- Specialist Advisor
- Director Data & Analytics Portfolio
- Clinical Risk & Practice Improvement Manager
- Strategic Advice & Design Governance Lead
- Clinical Director
- Director of Medical Services
- Medical Advisor
- Manager Health Analytics Business Support
- Executive Director Clinical Governance
- GP Specialist Consultant
- Executive Director
- Biostatistician
- Service Rationalisation Project Manager
- A/Director Allied Health
- Director of Medical Services
- Rural Director of Medical Services
- Implementation Manager

Six key topics

- Synchronous - to support point of care decisions
- Asynchronous - to support reflective practice
- To guide and support system responses to clinical variation
- How to assess and invest in data analytics at a system level
- Integration of analytics across data sources - a multimorbidity perspective
- Knowledge generation and transfer through research and education

Three perspectives

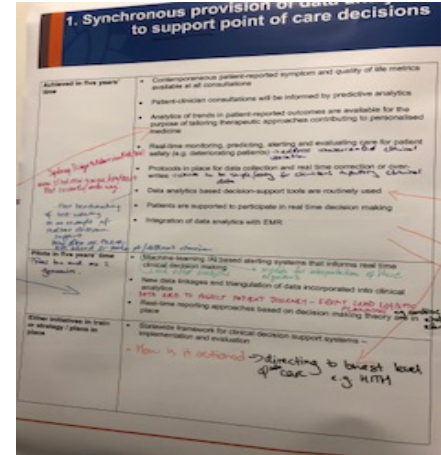


Three time perspectives

- Achieved in five years' time
- Pilots in five years' time
- Either initiatives in train OR strategy / plans in place in five years' time

Workshop: face to face

- Six themes
- Produced 135 statements
- Barriers and enablers
- I statements
- Mapped to 23 vision statements



Delphi round 1: online survey

Five Year Vision- Clinical Analytics

Please indicate whether you accept, reject, or suggest a modification for each statement. Provide any suggestions for additional statements at the end of each section.

Clinicians' Perspective in five years' time

1. Clinicians will, as a matter of course, use patient reported measures (gathered via patients' phones and tablets), incorporated into other diagnostic and prognostic markers and inputs.

- I accept this statement, as formulated I do not accept this statement
- I propose a modification to the statement- change it to:

2. Algorithms will assess patterns, patient trajectories and risk strata for patients and this information will be considered in the consultation.

- I accept this statement as formulated I do not accept this statement
- I propose a modification to the statement- change it to:

Delphi round 1: results

CLINICIANS' PERSPECTIVE In five years' time:

Clinician training will incorporate the use of analytics and address issues such as managing risk and uncertainty. 91%

Very targeted and well validated alerts will highlight risk and safety issues. 86%

Data will be discussed within clinical teams so that clinicians can collectively assess the data and identify causes of variation and plan improvements. 86%

Efforts will be underway to secure wider data linkage to incorporate non-health sources 86%

Aggregated, time-series data will be collected unobtrusively through eMR and other routine clinical tasks. 82%

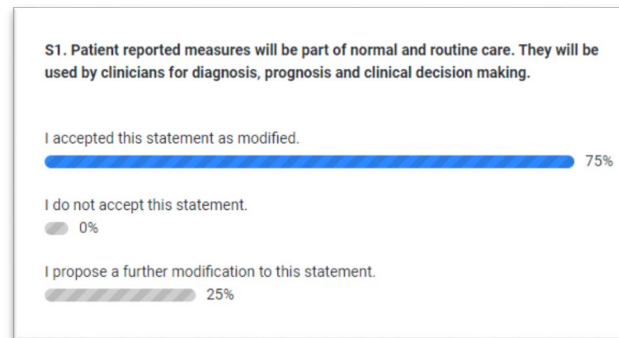
Feedback will be informed by the evidence on clinical decision making – incorporating passive 'automated' predictive analytics as well as peer to peer and expert feedback. 82%

PATIENTS' PERSPECTIVE In five years' time:

Patients will be firmly established as key informants in healthcare – providing data about their health status, experience and outcomes.	91%
Patients will be supported to manage their health issues	77%
Self-management will be prompted by algorithm enabled alerts.	73%
Patients will be engaged in monitoring their health using wearables that feed data into analytic repositories	68%
Patients will be assured that: their data are secure, that the healthcare system will 'find them' and intervene at an early stage to avoid a crisis; they have the information and support they need.	55%

Delphi round 2: real time consensus building

- From first round, 12 statements achieved 80%+ agreement
- For remaining 11 statements, modifications were suggested
- Sli.do
- Redraft text, vote and repeat until consensus (80%+ agreement) achieved
- 11 statements, up to five rounds of drafting
- 90 minutes
- Final statement – 445 words



Next steps

- Feed into the NSW Health Analytics Steering Committee
- Implementation plans – what do we need to realise the vision?
- Publish – and apply the process to other questions

Thank you

