The CNAHS

Service Planning Toolkit

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Central Northern Adelaide Health Service

… the story of a pilot

population health based

service planning toolkit

enabled by GIS

and built for planners in a regional health service

(… which really turns out to be a story about our users)

… set in Adelaide, South Australia (down under)

Image: erik k veland

Image: roger smj

Image: here's kate

Image: mugley

in our health region…
the Central Northern Adelaide Health Service

790,000 people

16,000 staff

4 major hospitals

200 health units

12 administrative directorates

Adelaide

"us"

- health informatics

- decision support and data analysis

- information & evidence to support regional planning decisions

- the people who do the GIS thingy

- nerds, gurus, computer whizzes

"them" (i.e. the users)

- generally not planners in true sense

- BUT called upon frequently to conduct planning exercises & make planning decisions

- have little or no prior knowledge of GIS

- can have a limited exposure to data analysis and epidemiological methods

an environment where thousands of

complex decisions

are made every day about population health...

BUT

the problem

- fragmentation
- duplication
- confusion
- delays
- frustration

our goal:

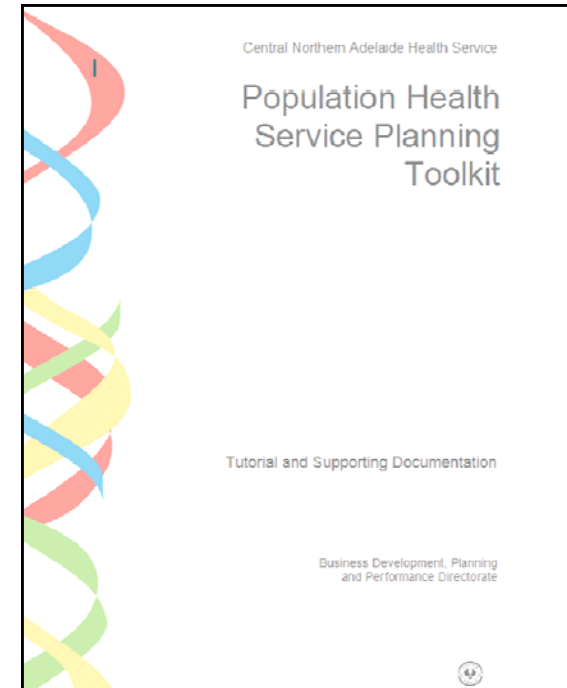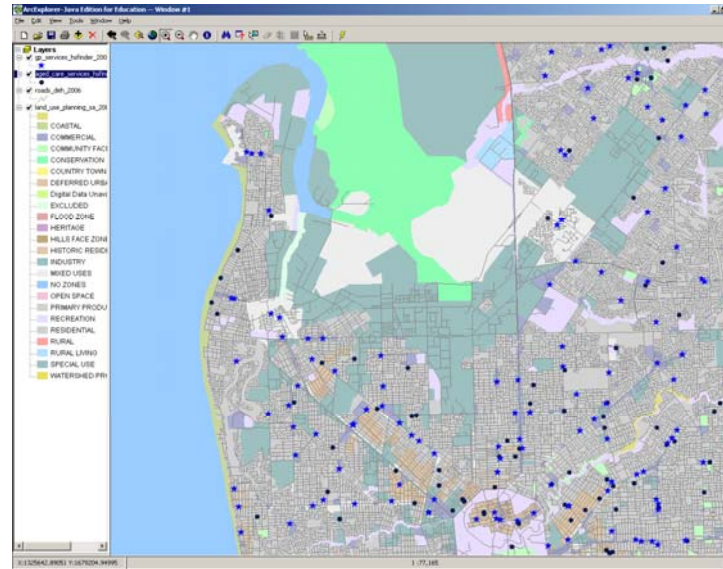to support planning decisions by providing a toolkit which would:

support **evidence based** decision making and

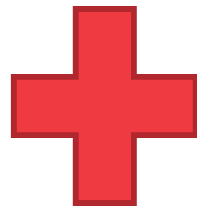enable a **population health approach** to regional planning

Image: chailey

the toolkit

conceptual model
(adapted from Barnard & Hu 2005)

+ **GIS application** **+** **training**

the model

Population Health Status (Continuum of Care) : Step 2

		Level 5	Level 4	Level 3	Level 2	Level 1
		Well Population	At Risk of Chronic Disease	Newly Diagnosed	Established Chronic Condition/ Disease	Diagnosed Chronic & Complex needs
Category 1	Preventative programs/ services i.e. immunisation or screening					
Category 2	Programs/ services preventing avoidable hospitalisations for acute conditions and/or functional related issues					
Category 3	Programs/ services for selected chronic conditions to prevent/ reduce the severity of acute exacerbations and avoid hospitalisation					
Category 4	Programs/ services that enable early discharge from an acute care hospital to reduce length of stay.					
Category 5	Programs/ services that improve access for vulnerable populations and, or address the social determinants of health.					

CNAHS Out of Hospital Care Service / Program Usage: Step 3

Step 4

the application

demographics

chronic disease

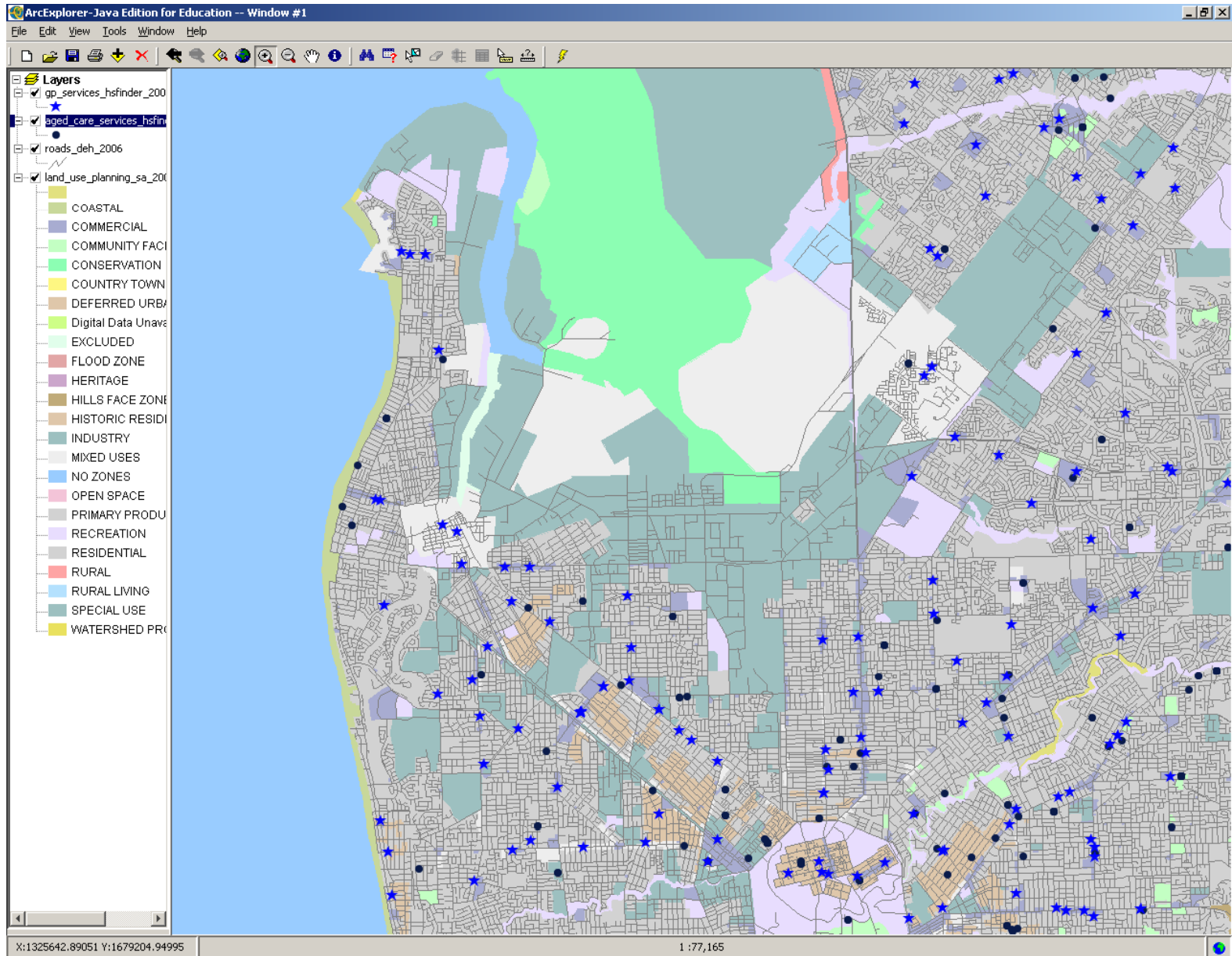health services - location

risk factors

functionality

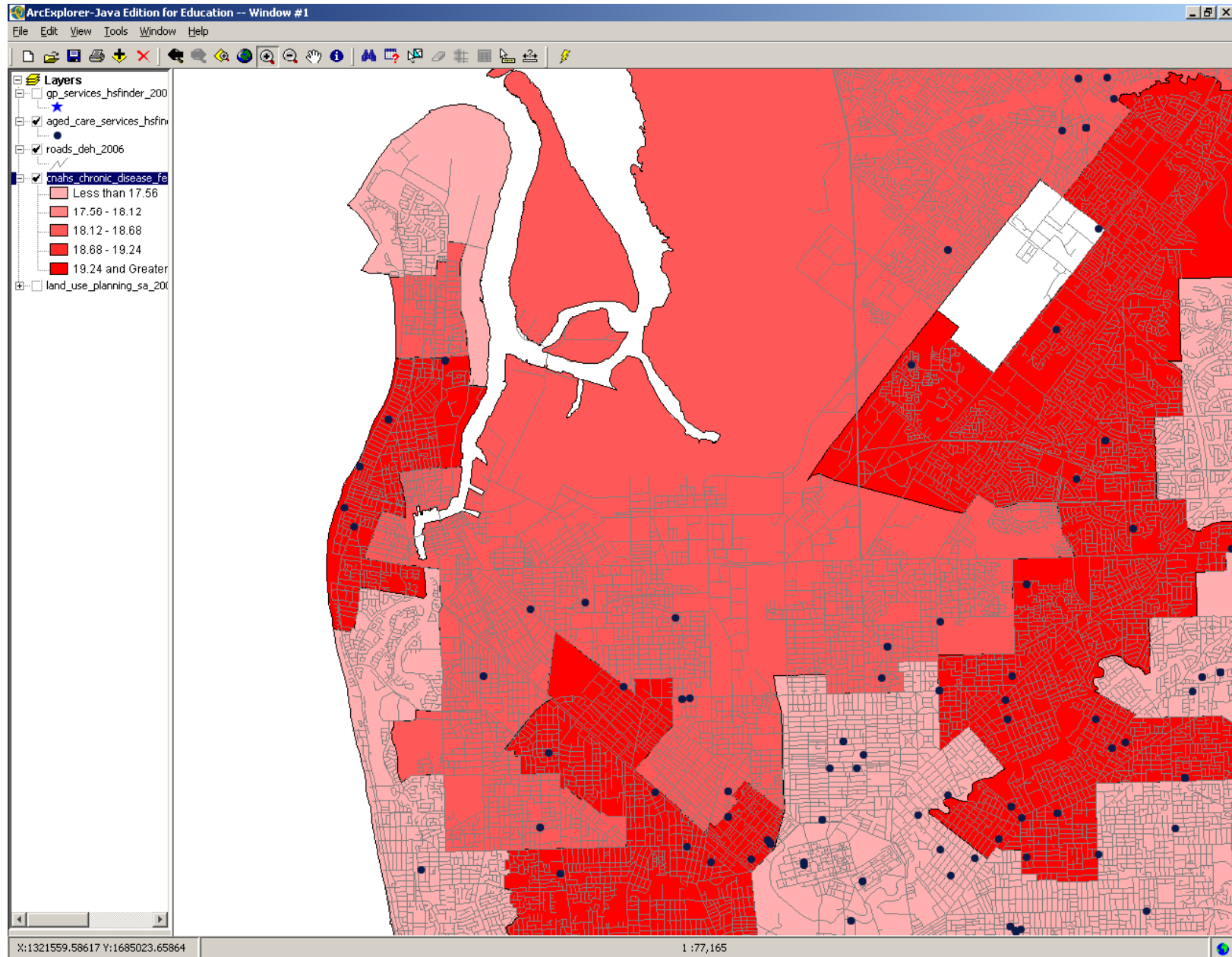health services - utilisation
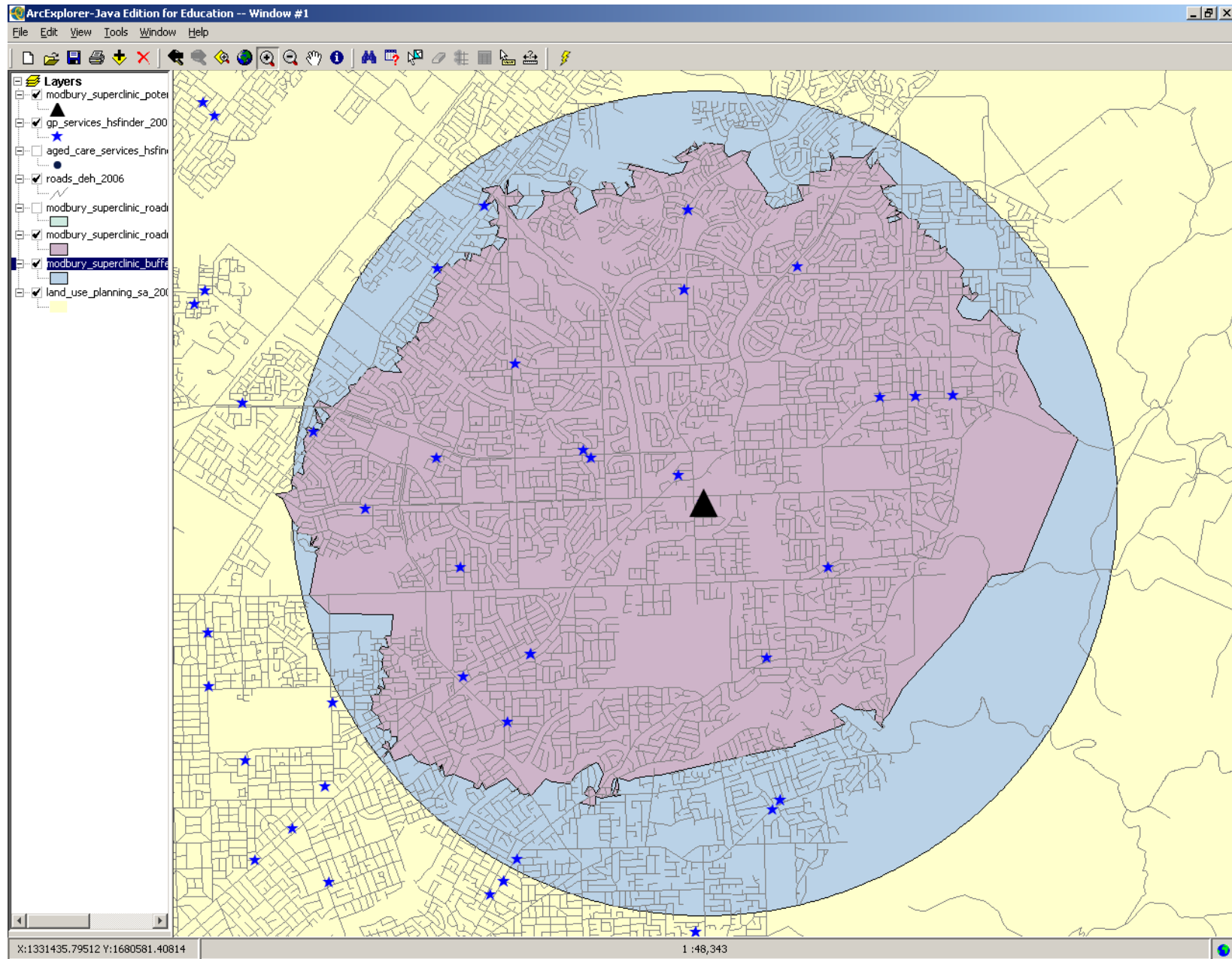
wellness

health services - financials
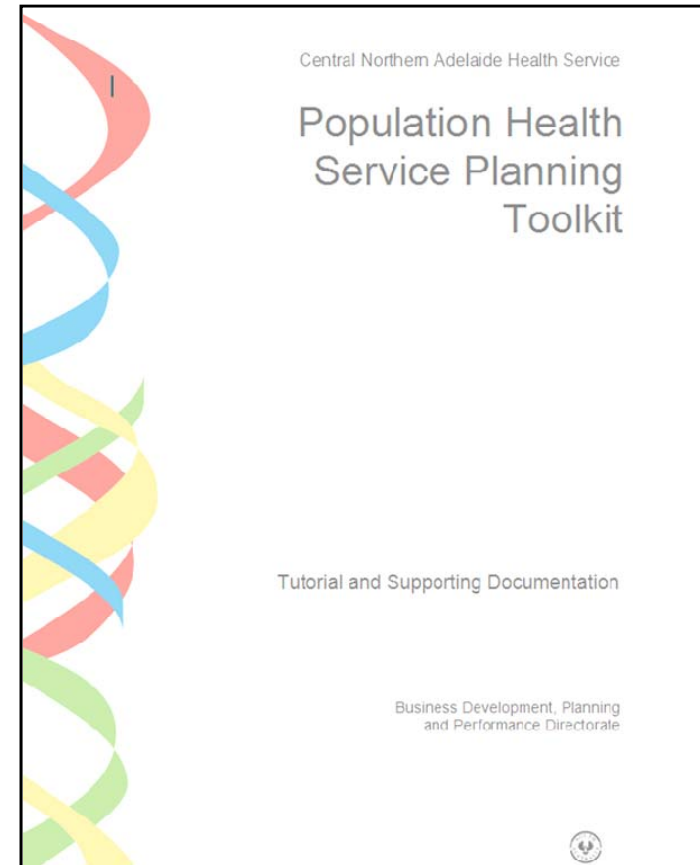
the application

the application

the application

the training

user evaluations:

- usefulness 8.4

- comprehensiveness 8.6

- training ease 8.6

n=42

Central Northern Adelaide Health Service

Population Health Service Planning Toolkit

Tutorial and Supporting Documentation

Business Development, Planning and Performance Directorate

If you build it, they will come …
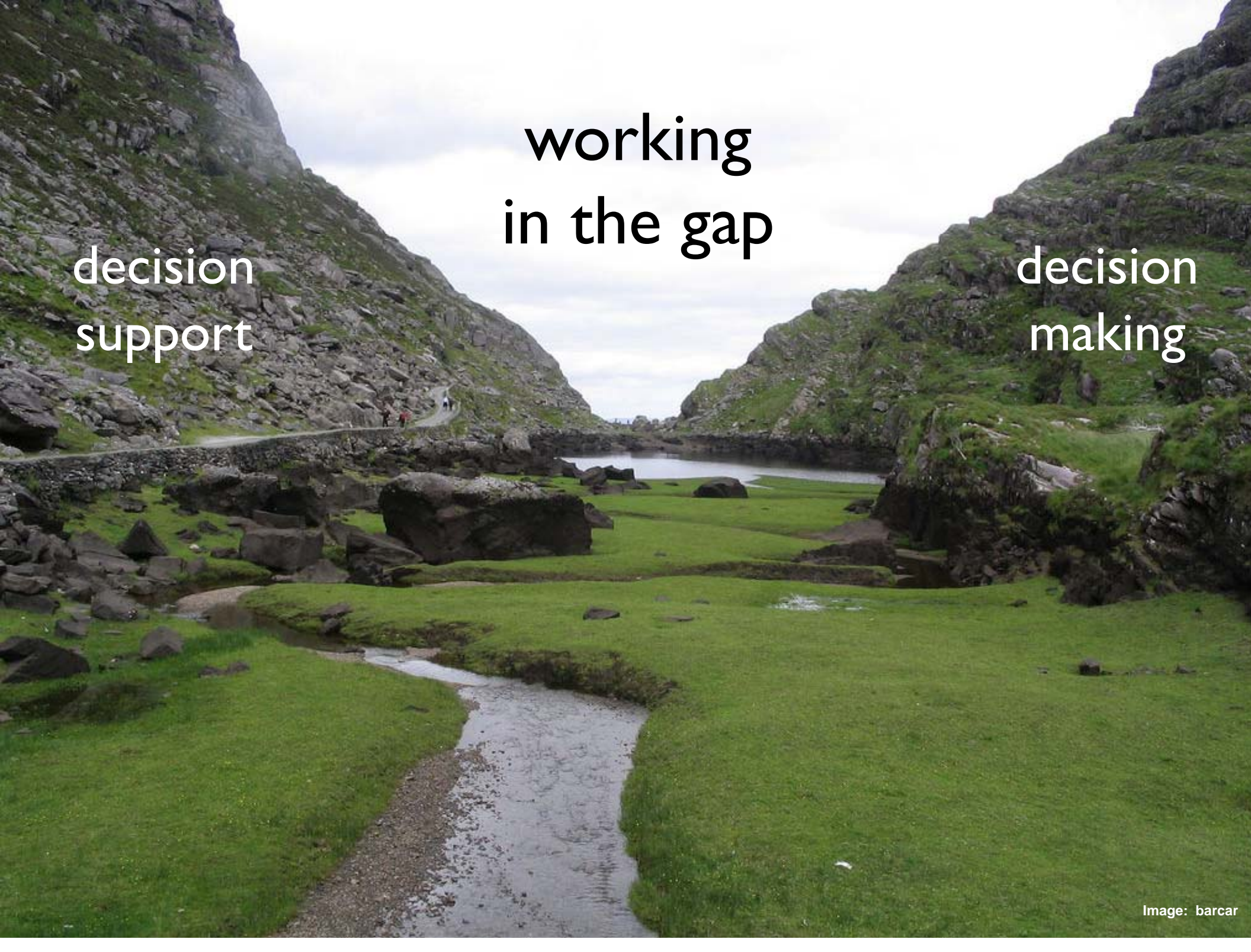
… but what if they don't?

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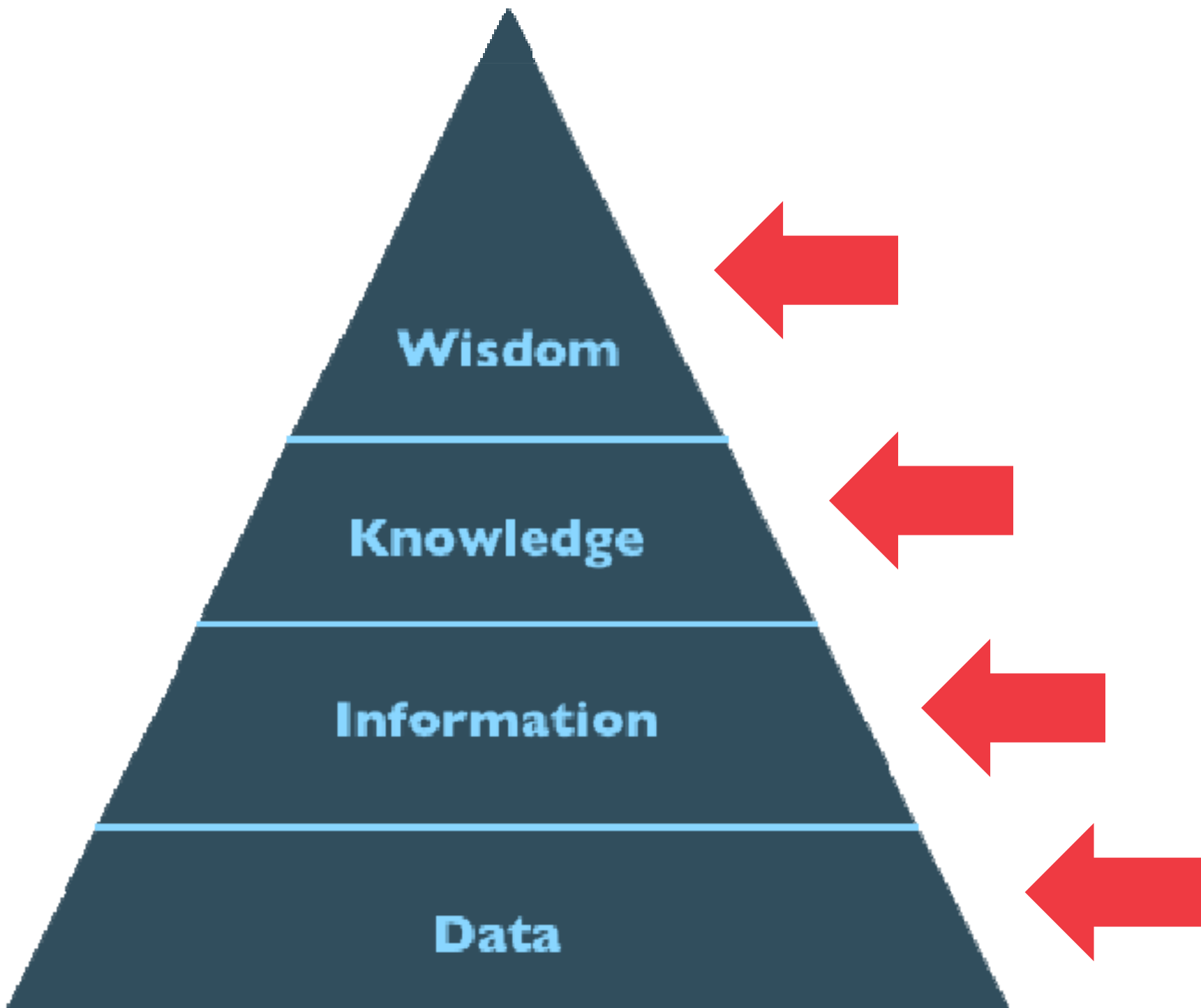
collaboration

moving from "us and them" to
"we"

working
in the gap

decision
support

decision
making

Image: barcar

CNAHS Service Planning Toolkit: Suggested Planning Framework

Identify the Planning Context and Population of Interest	Assess Health Status	Describe Existing Service Utilisation & Provision	Identify Service Gaps & Duplication	Develop and Implement Strategies	Evaluate
What is the context (scope) of the planning?	What health outcomes are of interest?	What service utilisation data will be useful to the analysis?	Where are the service gaps if any?	What type of strategies could be developed to address this health outcome or issue? How will they be selected?	How will the short term impacts of the project or model be measured (process evaluation)?
What are the aims and objectives of the planning?	How will the health outcomes to address be prioritised?	What is currently being done to address this issue within the catchment?	Does duplication exist?	Is there any evidence about best practice?	How will the long-term effects of the project or model be measured (outcome evaluation)?
Who is the broad population of interest? Is this a universal or a targeted service or program?	Are there specific targets or benchmarks related to the planning?			Are there existing strategies, programs & resources that could potentially be built upon?	How will the lessons learned be captured and used to improve the planning process?
Where are the boundaries of the service catchment or area of interest?	Are there contributing factors related to the selected health outcome?			What is the implementation plan for the proposed strategies? What evaluation components need to be built into the implementation?	
	How do these outcomes and contributing factors vary within the catchment area?				

Give a man a fish and you feed him for a day. Teach him how to fish and you feed him for a lifetime.
- Lao Tzu

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