

# Leading the way in community- based care casemix systems

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- NGO delivering community and home-based health and social care services
- More than 110 years in Western Australia and 120 years in South Australia (as RDNS)
- Expanding within Queensland, NSW and Victoria
- **Health Division:** Wound, continence, palliative care, HITH, Nursing care etc
- Looking to build capacity to adopt a casemix based management approach

# Why move to casemix approach?

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- Increasing number of providers in the community with pressure for competitive pricing and service sustainability
- Need to better understand cost drivers, be able to articulate the complexity and specialisation of services delivered
- To improve allocation of financial and staff resource and achieve efficiencies
- Some pressure from State health funders in an environment with established casemix funding systems – need to ‘talk’ the same language

# Project aim:

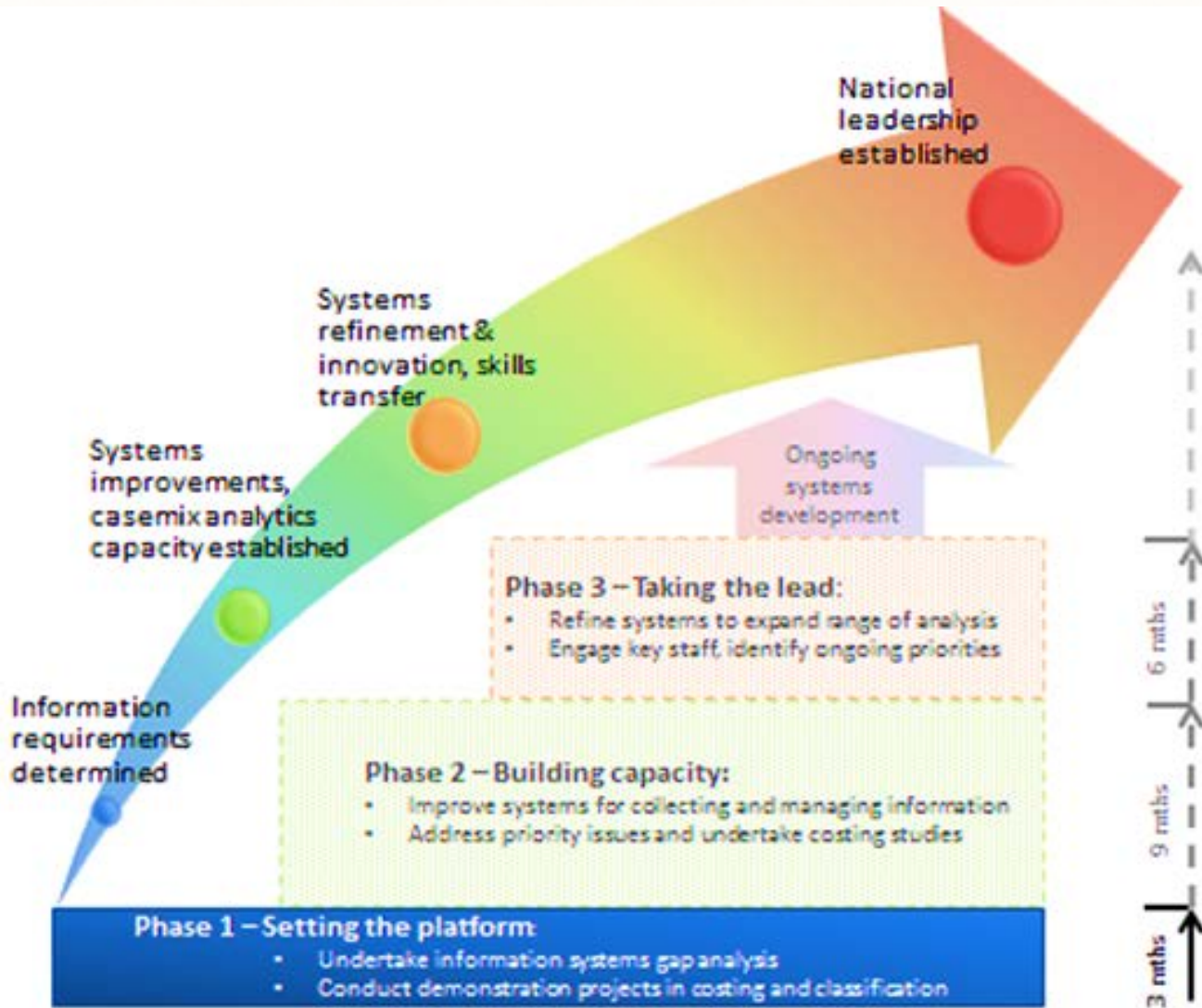
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To establish the capacity for a casemix approach to managing Silver Chain community-based health services.

Implementation of the key casemix elements:

- *Activity-based costing*
  - To understand cost drivers and inform pricing
  - Development of cost weights for different services
- *Classification system*
  - Clinical and resource utilisation similar groupings
  - Groups based on service and client characteristics
- *Developing the capability for casemix analytics*

# The collaboration model



# Phase 1: Setting the platform

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- International literature review for key variables in classification systems
- Gap analysis to assess the capabilities of the data collections and information systems to support casemix-based management
- Can activity based costing and classification development occur with current systems? What would they look like?

# Phase 1: Findings

- ✓ The Silver Chain information systems could support both activity based costing and classification development
- ✓ Data collections were a rich resource of information and the data structures generally suitable for linkage, despite some fragmentation of data sets
- ✓ Existing information systems could be used for initial development work but would have to be improved over time
- ✓ A casemix-based approach to management could be established in this community based care environment

# Phase 1: Challenges

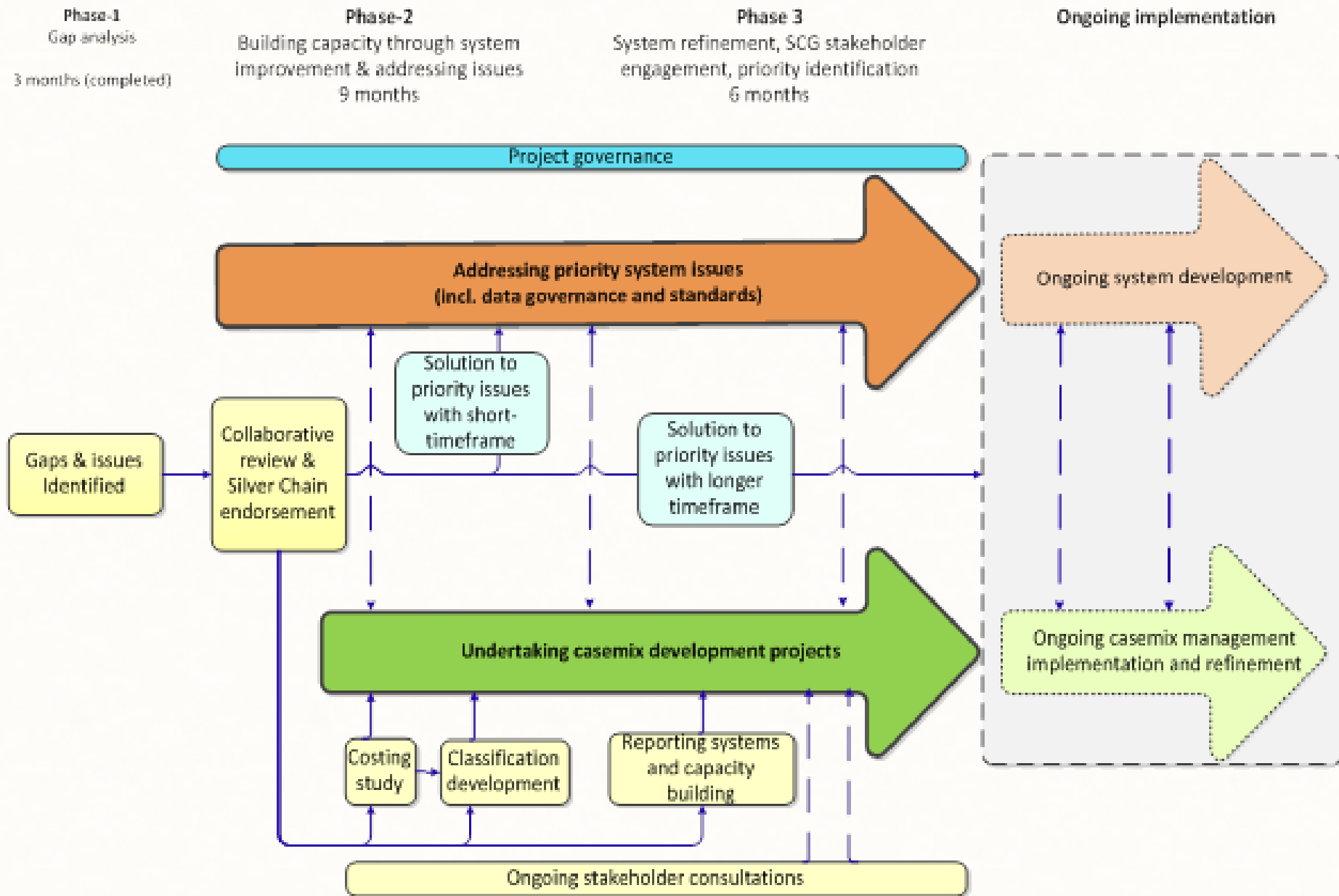
- Inconsistent organisation-wide data governance
- Data collections driven by contract requirements – no Silver Chain minimum data set
- Capture of '**service unit**' is contract rather than care episode driven
- Financial practices of internal charging inconsistent with activity based costing approach – predetermined rather than utilisation-based
- Client characteristics and service related activities not linked



# Phase 2: Building capacity

- Development of a collaborative project methodology
- Prioritising issues identified in Phase 1 and identification of leaders within Silver Chain
- Two ‘critical’ issues identified as key dependencies for the project:
  1. Provision of a data governance framework for the project
  2. Developing a working definition of ‘episode of care’ to enable costing and classification development
- Two streams of work; ongoing internal systems development and technical projects (costing, classification and reporting systems)

## Casemix based management capacity building in Silver Chain - developmental phases



# Episode of care

- Two key triggers for a new episode of care;
  - A new **‘product’** of care is delivered
  - The **‘goal’** for the care being delivered has changed
- Agreed as working definition by SC expert panel
- Aligned with;
  - Fast Healthcare Interoperability Resources (FHIR) and
  - Metadata Online Registry (METeOR) - Australian Institute of Health and Welfare
- Now being retrospectively applied to two years of data.

# Products

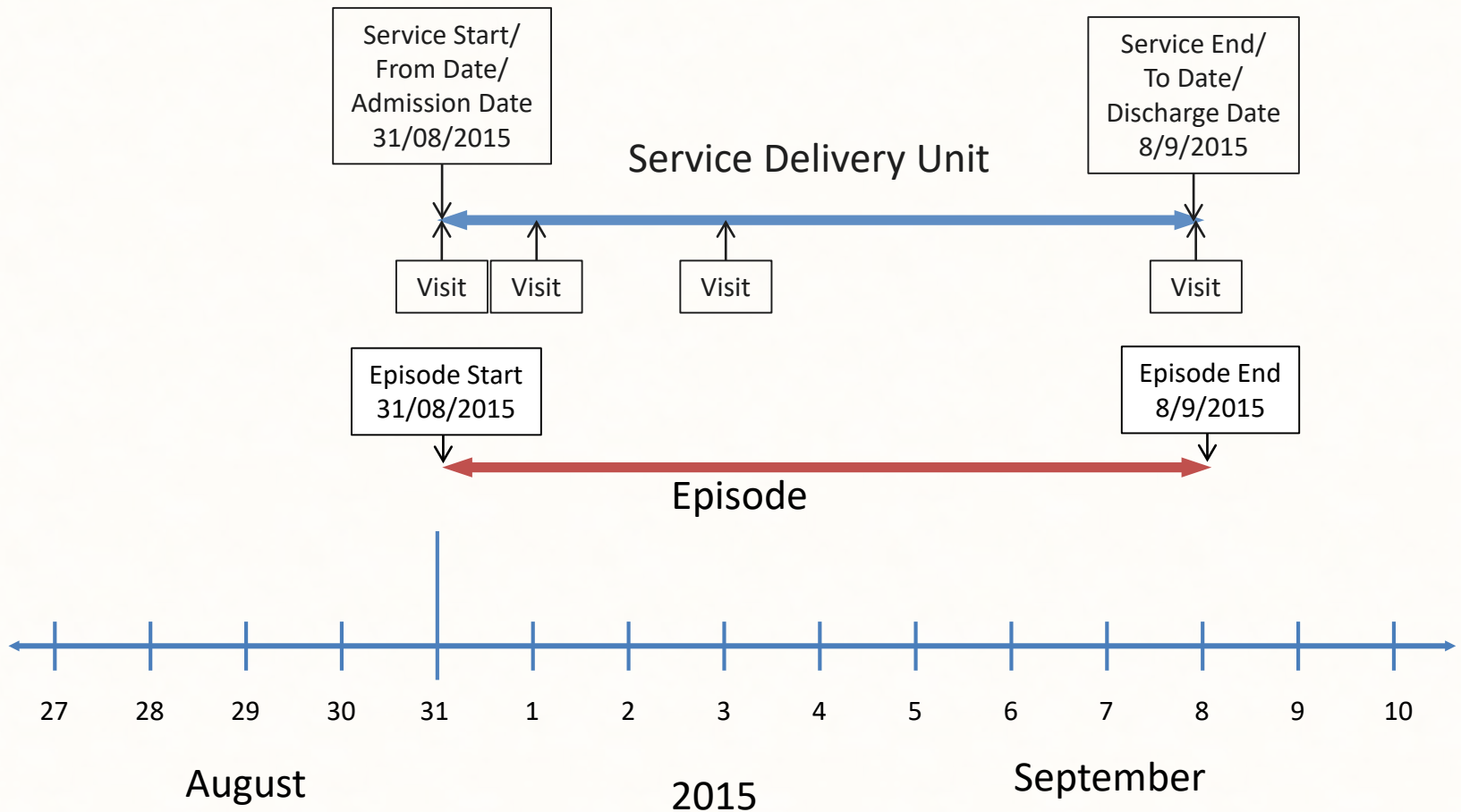
- Assessments
- Palliative care
- Maternity care
- Hospital @ Home
- Health navigation
- Wound care
- Continence care
- Diabetes
- Case management

# Goals

- Prevention/maintenance
- Issue that will be resolved
- Function will improve but issue will not be resolved
- Long-term care need for ongoing support
- Support for end stage of illness
- Time limited program to be delivered

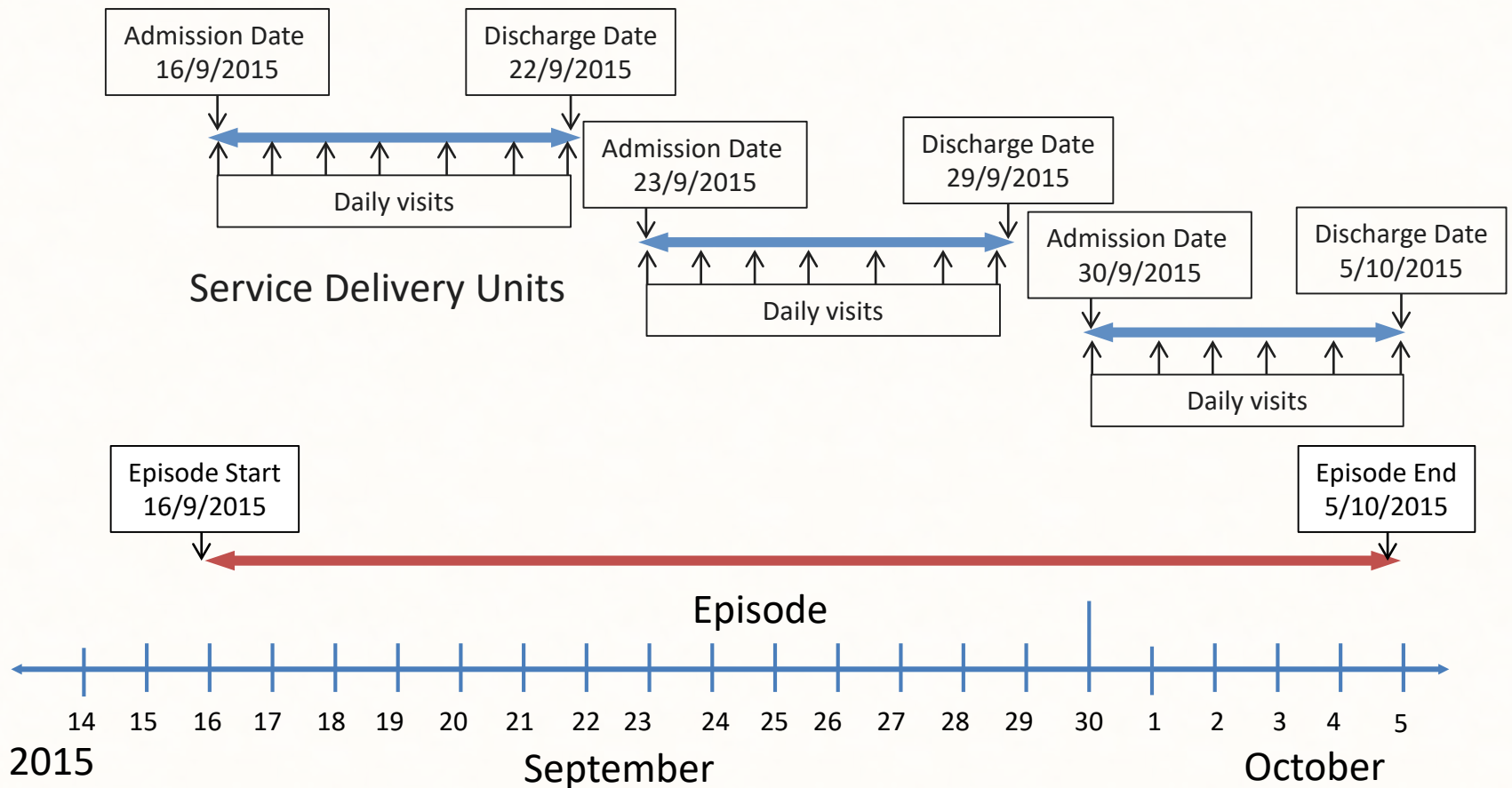
# Example 1: A Simple SDU to episode

Client: Female, 25 yo  
Product: Maternity care  
Goal of care: Program completed



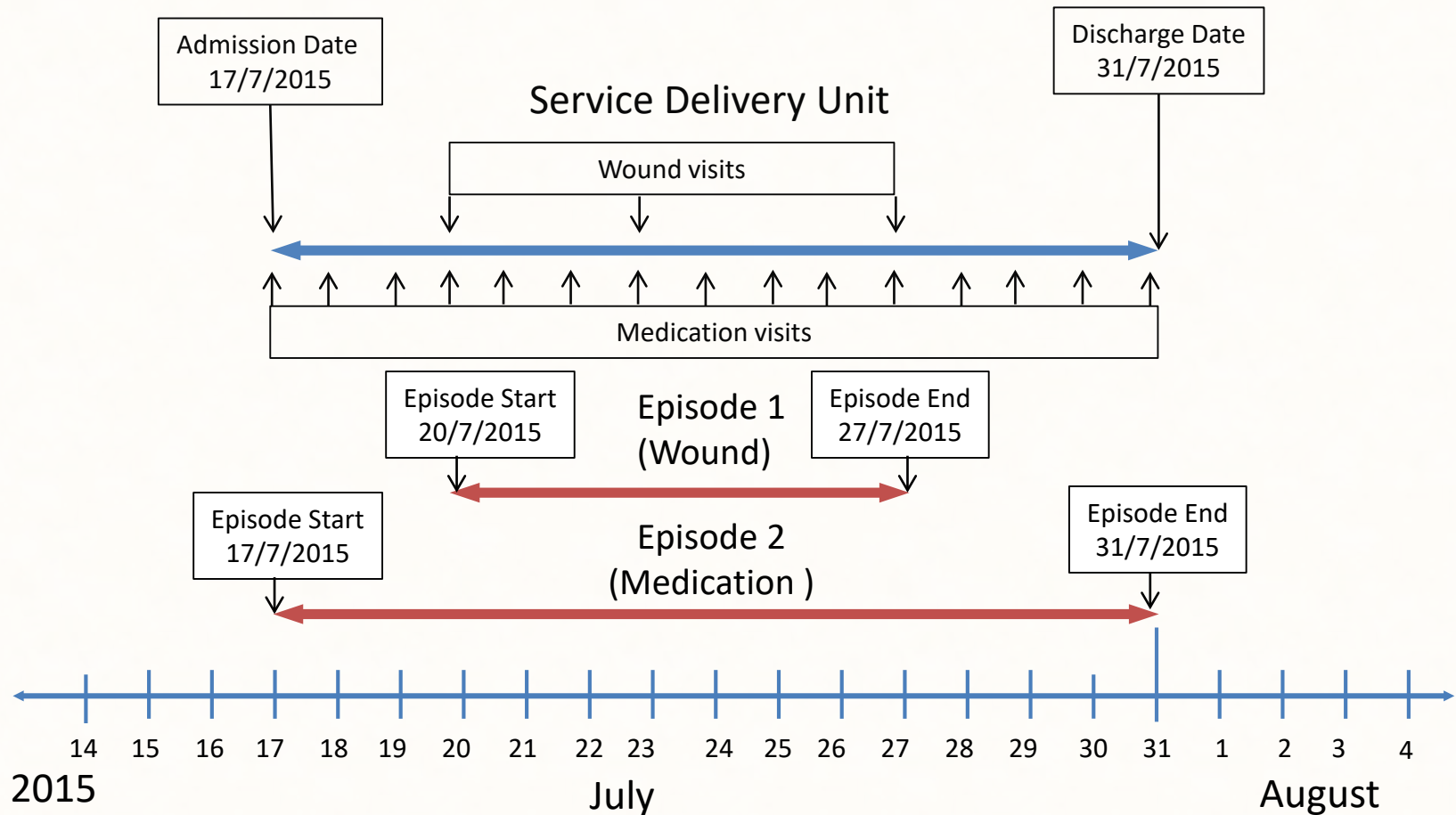
# Example 2: Consecutive SDUs to episode

Client: Male ,70 yo  
Product: Palliative Care  
Goal of care: Support for end stage illness



# Example 3: Nursing SDU to concurrent episodes

Client: Male, 68 yo  
Products: Wound Care, Diabetes Medication  
Goal of care: Resolution of issue, program completed



# Episode: Analysis units

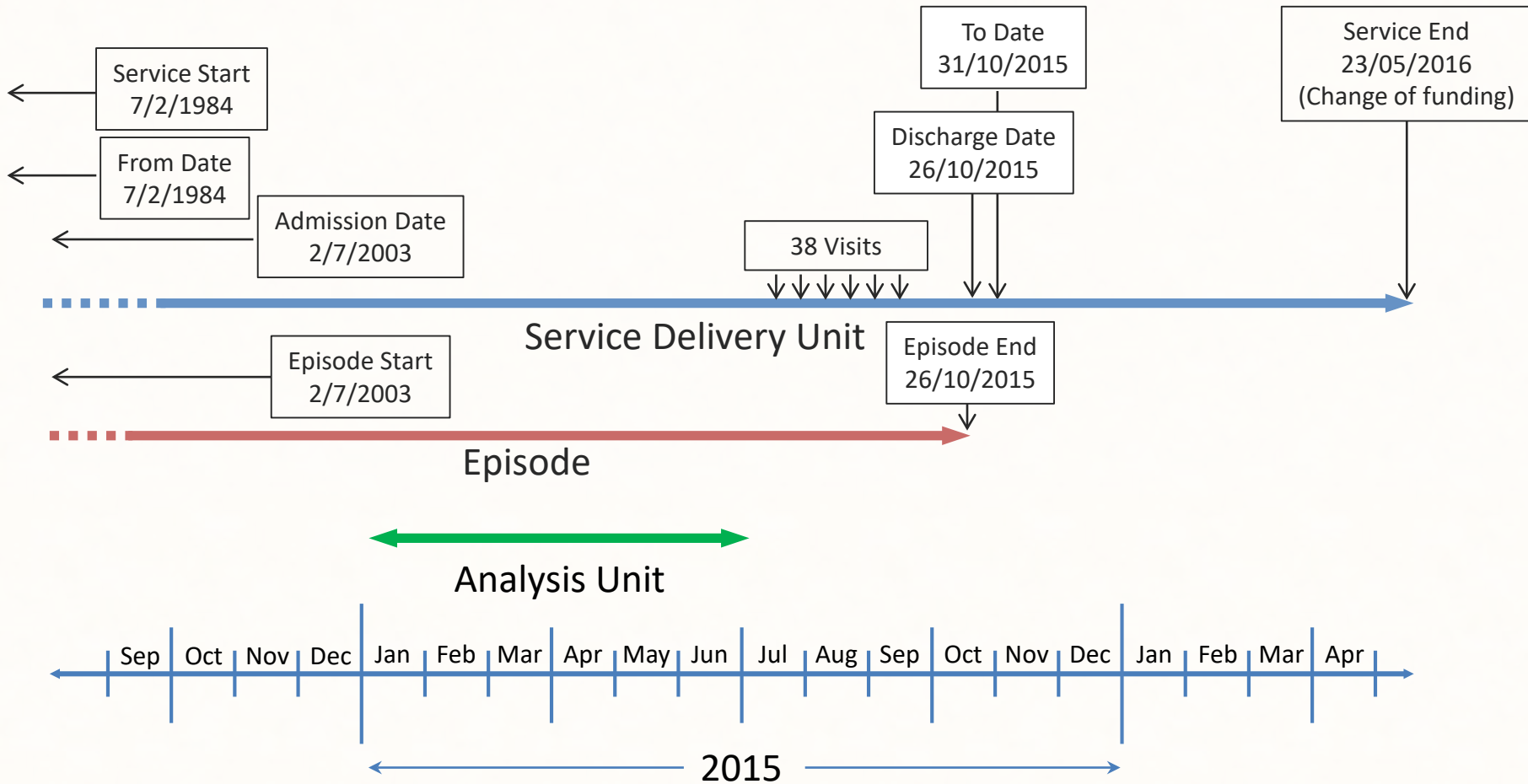
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- For practical reasons we may want to break down very long episodes so that we can analyse data within a defined period.
- Analysis units can vary in length depending on the analysis being performed and the parameters being analysed.
- Analysis units will be measured based on a meaningful rate e.g. contact minutes per day, visits per quarter



# Example 2: A Long SDU to an Analysis Unit

Gender: Male, 62 yo, quadriplegic  
Product: Wound care  
Goal of care: Long term care need



# Phase 2: Costing study

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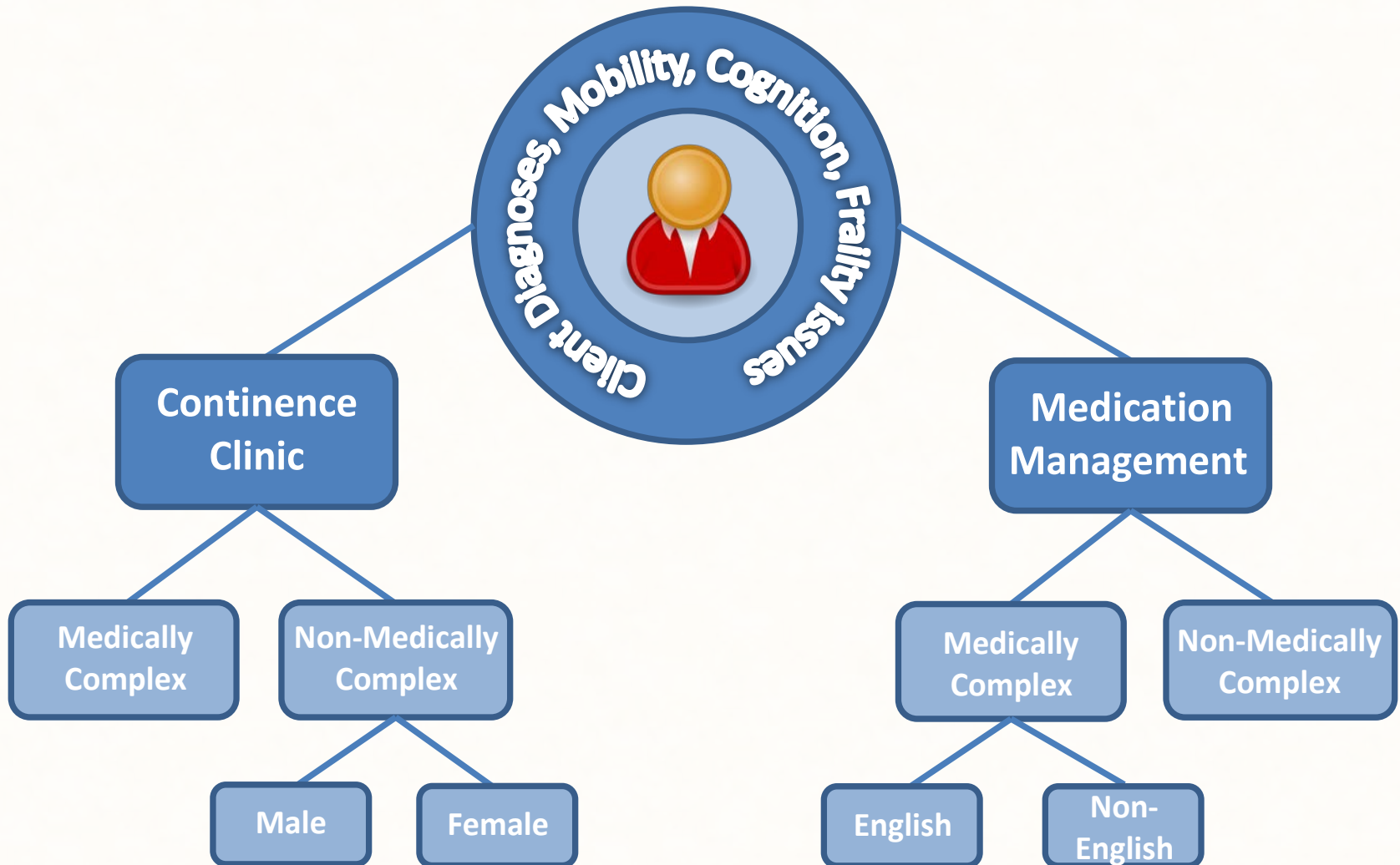
- Costing methodology workshop – July 31
- Study undertaken on two years of data
- Extensive consultation for first time study: in-scope finances and client activity, cost centre types (direct, indirect, corporate concepts), cost allocation methodologies, account rollups, linking activity data to expense data, costing fractions.
- Costing process and preliminary results to be delivered by end of 2017.

# Phase 2: Classification development

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- Clinical expert advisory panel established
- Finalising client clinical data variables to test in classification development – focus on mobility, behaviour, cognition, personal care, carer support, diagnoses
- Considering all current clinical characteristics
- Statistical analysis of the costing study results with clinical and demographic variables to identify cost drivers

# Multi morbidity/problem model



# Phase 3: Taking the lead

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- This phase will involve:
  - building capacity for casemix-based management using the new costing and classification data
  - developing a reporting suite
  - delivery of a casemix analytics course, including practical examples using local data
  - Ongoing improvement/refinement of information systems based on identified medium and long term issues
  - Discussions with funders re contract negotiation

# The future is not so far away!

## Silver Chain as a leader in casemix-based management for community-based care

- Evidence based decision making
- Understanding the costs and resources required to deliver valued outputs
- Identifying the needs of the clients and the skill mix required to service those needs
- Effective and sustainable service delivery and pricing
- Ability to benchmark and compare services
- Alignment with the other health care sectors using casemix systems

# Thank you

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