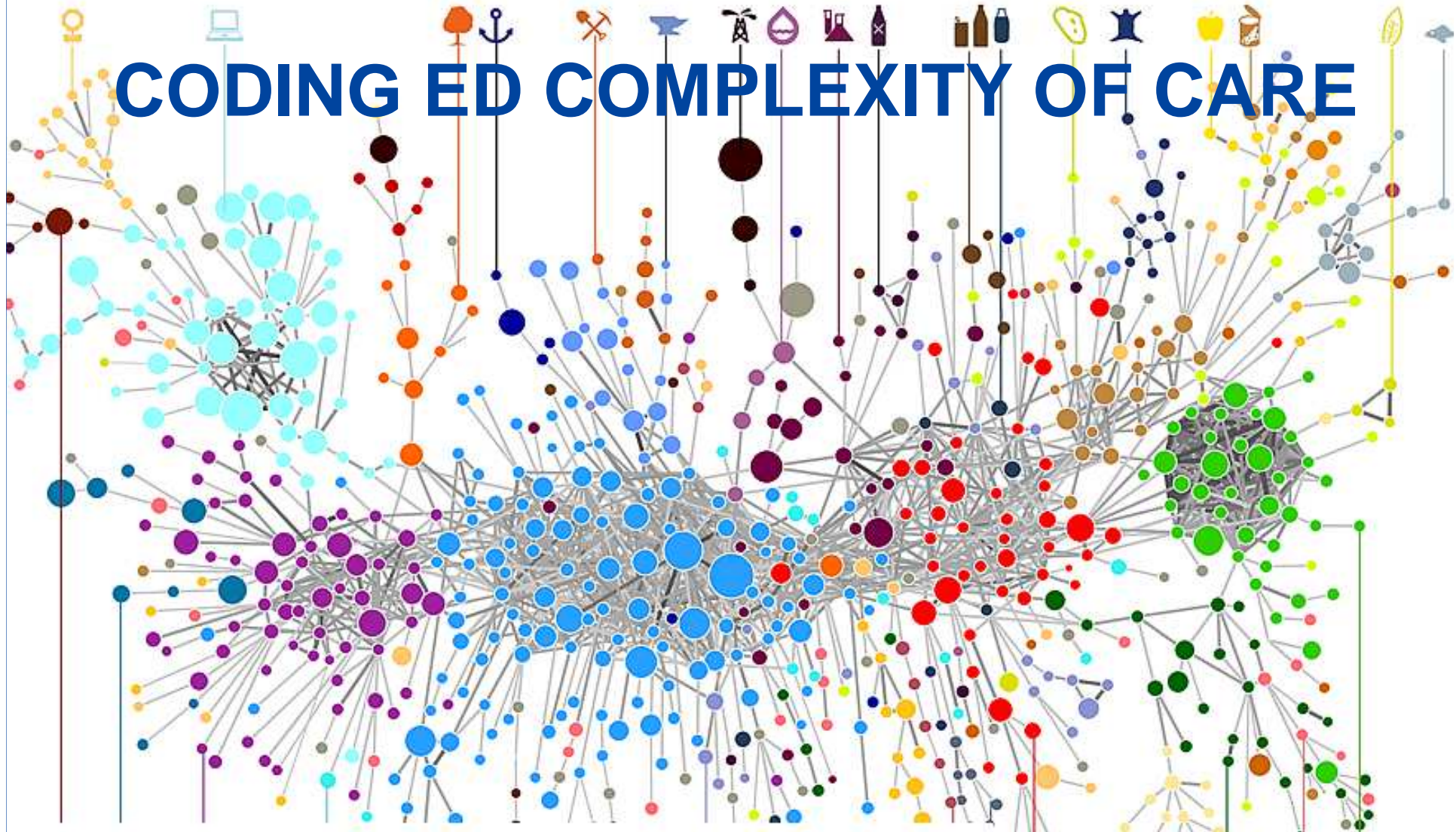


CODING ED COMPLEXITY OF CARE



Sue Ieraci June 2014

ED care and Case-mix

- Link care provision to resource use
- Must make sense in the specific clinical setting
- Grouping must be logical AND meaningful
- Measures must be plausible, feasible, valid

Why not DRGs?

- Care relates to presenting problem, not necessarily final diagnosis
- Huge spectrum of severity within one diagnosis
- Iso-disease groups not necessarily iso-resource

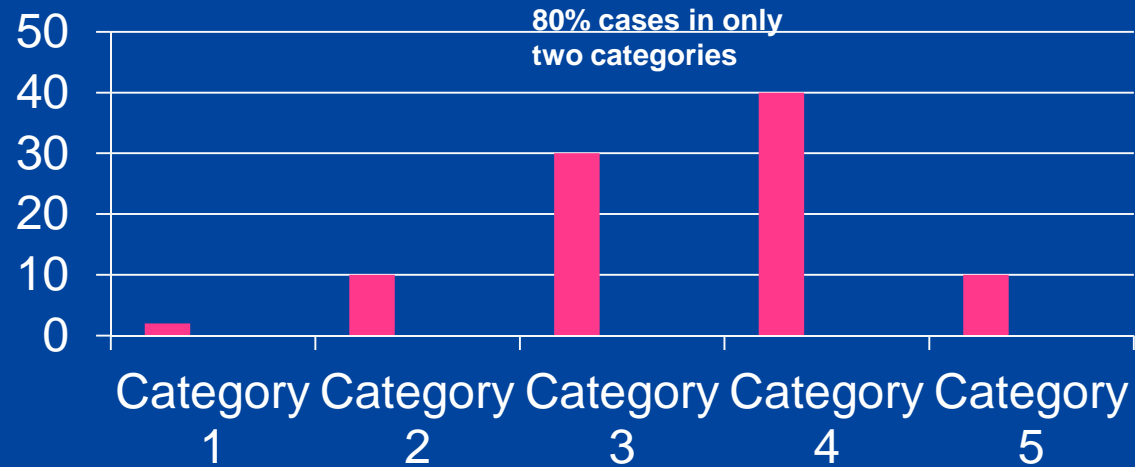
Current ED case-mix measures

- **Raw attendances** (total and by Triage Category)
- **Admission rate** (total and by Triage Category)
- Age

Hence

- Urgency related Groups (**URGs**) – Triage Cat
- **UDAGs** – Urgency, Disposition, Age

Urgency (ATS triage Category)



- Nearly everyone in ATS 3 or 4
- Huge range in complexity within ATS 3 and 4
- Greatest inter-rater variability between ATS 3 and 4
- (Better than nothing)

Some concepts...

- **URGENCY** = time criticality = triage category
- **SEVERITY** = how BAD is it (will I die?)
- **COMPLEXITY** = how DIFFICULT is it (to treat)?
- **DISPOSITION** = can I go home?

URGENCY ≠ SEVERITY ≠ COMPLEXITY ≠ DISPOSITION

Examples

Narcotic overdose (no co-ingestant)

- Urgent
- Severe
- Non-complex
- May go home

Old lady with recurrent falls

- Non-urgent
- May or may not be severe (don't know at outset)
- Highly complex
- May go home....ATS 4 discharge

The changing significance of DISPOSITION

- Admission to hospital prev. surrogate for severity &/or complexity
- Bed block has led to effort not to admit
- Complex elderly – easier for ED to admit than D/c

So, what is ED “complexity”?

- **Complexity of CARE** – (not of patient)
 - Renal failure patient with broken toe
 - Well teenager with undiagnosed joint swelling
- **How difficult is the diagnosis and management?**
 - Diagnostic difficulty
 - Decision-making difficulty
 - The tasks and people involved in management

A draft tool...

- Started with NSW definition of “ED admission”
- Tweaked
- Multiple “delphis”
- Workshopped with clinicians and casemixers
- More tweaks (now more than a decade – cringe)
- Feasibility study 2003 ✓

Now:

Plausible ✓ Feasible ✓ Valid ?

A short digression – to Delphi

The Oracle Mt Parnassus, north of Athens C8BC

The Legend: Pythias were (female) virgins who dedicated their lives to prophesying on behalf of the god Apollo.

The Pythia was inspired by “mysterious vapors”

“the pneuma arose from a small opening (*chasma ges*) in the *adyton*: “Over the mouth [of the opening] a high tripod is set. Mounting this, the Pythia inhales the pneuma and then speaks prophecies in verse or in prose. The latter are versified by poets on duty in the temple”

The Reality

Nitrous oxide (laughing gas)

The priests controlled access and delivered the messages

The virgin was high as a kite and the priests controlled everything



So, where were we?

- ED measure of workload – not diagnosis
- Urgency not enough – most in ATS 3 & 4'
- Disposition no longer works
- Urgency and severity different to complexity
- Complexity = difficulty + amount of work required

- *(The Pythia was drugged and controlled)*

Components of the draft tool

Three dimensions:

- **URGENCY** – but only BINARY
- **NATURE OF THE VISIT** – people + skill + tests
- **PROCEDURES** – number and type

Scoring complexity

Urgency

1 (ATS 1 or 2) or 0 (ATS 3,4,5)

Episode complexity

1 (single provider simple) to 5 (team resuscitation)

Procedural Complexity

0 (no procedures) to 4 (multiple team procedures)

Total: 1 (ATS3-5, single provider, simple case, no procedures) to 10 (ATS 1-2, team resusc, multiple complex procedures)

Practical issues:

- No value real-time, so no need for contemporaneous clinician coding
- Can be done retrospectively by professional coders from the chart
- No need to code every visit – snapshots

Current Status of the Tool

- **Plausible** – clinicians + coders
- **Feasible** – ED trials 2003
- **??Valid??**
 - Needs properly-funded intensive costing study
 - Considered multiple times for funding state + Feds
 - (Oracle never consulted, priests never supported)

© Original Artist / Search ID: form445



WHAT I DON'T UNDERSTAND IS HOW ALL THREE OF US MANAGED TO GET THE FIGURES WRONG!

Rights Available from CartoonStock.com