CENTENARIANS IN NSW EMERGENCY DEPARTMENTS

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NURSE I NEED 10 CCs of Epi
OR THIS MAN WONT MAKE IT

gsw
gsw
gsw

ideal

I haven't pooped in 5 days, can you
get it out for me

reality

www.iddxblog.com 2008
AUSTRALIA - AN AGING POPULATION

• Centenarians are the “oldest old”
• People aged 100 years and over are the fastest growing age group in Australia
• Number of centenarians living in Australia in 2016 estimated to be 4870, with 1743 in NSW
• Expected to double every 10 years – by 2034, there will be over 15,000

Projected growth in number of Australians by age group from 2014 to 2034 (AIHW)
Getting old is getting old in Japan. The government has a tradition of presenting Japanese centenarians with the gift of a *sakazuki*, a silver sake cup, in the year they turn 100, but there are so many people hitting the milestone these days that the state is looking for a cheaper alternative.

The commemorative cups presented to Japan’s centenarians are valued at approximately $66. On September 15, Japan’s Seniors’ Day, the government sent the gift, as well as a signed letter from Prime Minister Shinzo Abe, to the 30,379 people turning 100 this year at a cost of around $2 million.
FUTURE STATE
NSW 2056

LIFE EXPECTANCY

Current
m 80.8 f 85.0
2056
m 88.6 f 91.4

Future State report: NSW residents living past 100 to increase tenfold by 2056, $17b gap in finances

By state political reporters Sarah Gerathy and Lucy McInerney and Elepi Paata
Updated 28 May 2016, 9:19am

More than 10 times as many people in New South Wales will be aged over 100 in the year 2056 than today, which will contribute to a $17 billion gap in the state’s finances, a State Government report predicts.

The Future State: NSW 2056 report, released today, also forecasts the state’s population will rise by 50 per cent to 11.2 million.

More than a quarter of those people will be above the age of 65.

Life expectancy is expected to rise from 80 to 83 for men, and from 85 to 91 for women.

A total of 18,000 people are predicted to live beyond the age of 100. By comparison, there are now just 1,500 centenarians living in the state.

Key points:
- $17b gap in state’s finances by 2056
- NSW population to exceed 11 million by 2056
- Life expectancy to rise to 83 for men, 91 for women
- Healthcare to account for largest share of government expenditures
According to NSW BHI ED data, centenarians have the highest rate of presentation out of all age groups.

In 2016-17, the presentation rate for this age group was 878 per 1,000 popn.

No Australian studies have been conducted around ED presentations in the “oldest old”
STUDIES ON CENTENARIANS IN OVERSEAS EDs

- Emergency Department Use by Centenarians: the 2008 Nationwide Emergency Department Sample (US study)
  - Most common reasons for presentation were fall related injuries (21.5%), followed by pneumonia (5%) and UTI (5%)
  - Less likely to visit for chronic conditions such as congestive heart failure, arrhythmias, chest pain and COPD
- US study looking at hospital admissions in centenarians showed an admission rate of 59%
  - Most common reasons for admission were pneumonia (11%), CCF (8%), UTI (5%), #NOF (5%) and sepsis (5%)
- UK study looked at the frequency, nature and outcomes of hospital admissions in centenarians living in a small area within north east England (population of 130 centenarians.)
  - 76% of presentations resulted in hospital admission - most common primary reason was respiratory tract infection.
  - Falls were identified as a primary or secondary reason for admission in 41%.
Aim
Describe the utilization of emergency departments by people aged 100 years & over, focusing on demographics, presentation problem and patient flow

Methods
A retrospective observational study in 150 EDs in NSW
Data collected as part of the “Demand for Emergency Service Trends IN Years 2010-14 (DESTINY 10.14) project” was analysed

10,798,797
ED presentations captured for all age groups in 2010-14

4,033
ED presentations for people aged 100 years old and over
RESULTS - DEMOGRAPHICS

Gender
• 78% patients were female

Place of residence
• 77% were living at home
• Little difference between patients from home and NH in terms of triage
• **Most common presenting problem**
  - Injury related  (29%)
  - Respiratory  (12%)
  - Cardiovascular  (10%)
  - Abdominal  (9%)

• **Most common admitting diagnoses**
  - Falls  (11%)
  - Fractures  (7.5%)
  - Pneumonia / RTI  (7%)
  - Wounds / superficial injuries  (4%)
  - UTI  (3.5%)
RESULTS - ADMISSIONS & REPRESENTATIONS

Admission rate - 64%

Representation rate (7 day) 5%
MONTH OF PRESENTATION
LOOKING TO THE FUTURE

Given their high admission rates and prolonged LOS, how can we streamline these patients through the ED?

Is there a role for specific pathways or geriatric assessment units that would aid to expedite their care and journey through the ED?
IS THERE A ROLE FOR SEPARATE GERIATRIC EDs?

ANZ SOCIETY FOR GERIATRIC MEDICINE
POSITION STATEMENT 2015 –
“THE MANAGEMENT OF OLDER PERSONS IN THE EMERGENCY DEPARTMENT”

• Rate of presentation for older patients to EDs is increasing at a rate faster than for younger patients
• Existing models of ED care were designed for acutely ill and injured patient rather than medically complex and functionally impaired senior
• Older pts present with more complex medication conditions, have longer ED and hospital stays, and are more likely to be admitted

• Over the last 10 years in the US, geriatric EDs (also called Senior EDs) have been popping up around the country.
• Their purpose is to provide excellent emergency care tailored to meet the needs of older adults in order to improve health outcomes in a cost-conscious manner
REDEFINING “OLD AGE”

Traditionally defined at 65 years & over (in developed countries and research literature)

Given the increase in our life expectancy and improvements in health, should this be redefined to higher age such as 75 years
Well recognized that an aging population is associated with an increasing burden of disease – however it is not just about chronological age.

Recent UK study looking at death certificates showed that “younger elderly” patients are more likely to die from chronic diseases such as IHD, COPD of cancer.

Centenarians are more likely to die from acute illnesses, such as infections.
Many centenarians are “healthy” but frail

Studies looking at the health of centenarians show that they are often “healthier” than their younger counterparts - US data shows:

- 23% reach 100 without any chronic disease
- 55% do not have any cognitive impairment

However, most centenarians are still “frail”

Priorities should be to develop appropriate management goals and pathways, which should include end of life planning
LOOKING MORE BROADLY – INJURY PREVENTION

• Falls and injuries are the most common reason for these people to present to ED
• Programs targeting falls prevention are important to reduce the burden of injury in this age group
• A study published in the most recent issue of JAMA has shown that older adults who exercise are half as likely to fall as those who don’t
• Rate of falls can be reduced further with a combination of exercise as well as additional therapies like eye exams, vitamin supplements and home repairs
ACKNOWLEDGEMENTS

DESTINY project team, supported by ACI