10 Facts We All Need to Know About Dementia (MNCD) in Old Age

DUNCAN ROBERTSON FRCP (LOND & EDIN) FRCPC

MEDICAL ADVISOR TO

ADVANCING DEMENTIA DIAGNOSIS AND MANAGEMENT IN ALBERTA AND PRIMARY HEALTH CARE –INTEGRATED GERIATRIC SERVICES INITIATIVE

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PHC IGSI: College of Family Physicians Canada Conflict of Interest slide

Faculty/Presenter Disclosure

Faculty: Duncan Robertson

Relationships with commercial interests:

- **Grants/Research Support:** None
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- **Other:** Formerly SMD SH SCN AHS
  Currently Medical Advisor ADSAP and PHC IGSI

PHC IGSI: College of Family Physicians Canada Conflict of Interest slide

Disclosure of Commercial Support

Potential for conflict(s) of interest:

- No conflicts of interest

Mitigating Potential Bias

No conflicts of interest

Fact 1

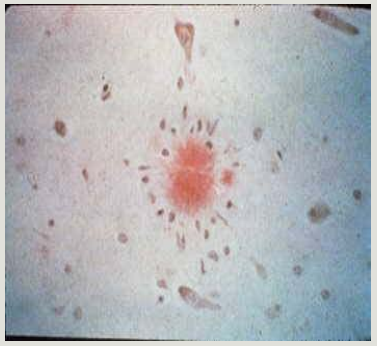
Dementia(MNCD) is much more than poor memory.

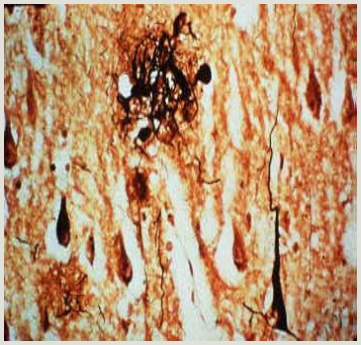
- **To diagnose dementia we need evidence of aphasia, apraxia, agnosia or executive dysfunction and that these changes are not due to a correctable condition and are sufficient to interfere with everyday activities.**

It's more than memory……

The "A"s of Dementia.

- Amnesia
- Agnosia
- Aphasia
- Apraxia
- Anosognosia
- Altered perception
- Abulia/Apathy





Abulia (Aboulia)

Difficulty in initiating and sustaining purposeful movements

Lack of spontaneous movement

Reduced spontaneous speech

Increased response-time to queries

Passivity

Reduced emotional responsiveness and spontaneity

Reduced social interactions

Reduced interest in usual pastimes

Fact 2

Very few patients accessing PHC alone complaining of memory problems have Dementia (MNCD)

- **Some have normal age-associated memory changes, depression/ anxiety , drug or alcohol related memory changes or mild cognitive impairment (MCI) or Mild Neurocognitive Disorder (DSM5).**

MCI (Mild Neurocognitive Disorder) Criteria

Does not meet criteria for dementia (CDR 0.5 or <)

Normal ADL/IADL

Normal general cognitive functioning

Subjective memory impairment

Objective memory impairment/decline

MCI is defined as subjective and objective memory deficits without significant aphasia, apraxia, agnosia or executive dysfunction. MCI may 'cross the line' to dementia at a rate of 8-15% per annum.

MCI Progression to Dementia

10 - 15% per annum

Tierney (2001) 29/123 in 2 years

Grundman (1996) 44% in 3-5 years

Ritchie (1996) 22% in 8 years

Persons with MCI may succumb to other conditions before developing dementia

Fact 3

- **There is no evidence that early treatment of MCI with anti-dementia drugs will delay progression to dementia.**
- **Investigations to rule out potentially correctable and contributory causes of memory loss are indicated together with promotion of "Healthy Brain Aging" and treatment of vascular risk factors that delay or prevent progression of both AD and VaD.**

Healthy Brain Ag(e)ing

Some ideas:

Mediterranean Diet. olive oil, limit red meat and eat more fish and chicken.

Stay active for a half hour, five times a week.

Don't smoke. If you do smoke, stop now.

Moderate use of alcohol

Maintain social connections in the community, volunteer work, or try a new hobby.

Get plenty of sleep.

Manage treatable conditions and reduce vascular risk factors.

Mediterranean Diet. What is it?

Fresh rather than processed foods

Plant-based: grains, vegetables, fruits, legumes

Fish, nuts, olive oil(monounsaturated&omega-3)

Skinless poultry and low-fat dairy products

Infrequent and small quantities of red meat

Moderate wine consumption, at meal times

Small portion sizes compared with Western diet

Fact 4

- **Persons living with Dementia and MCI, as well as others with damaged brains are at high risk of developing delirium when they are sick, injured, in hospital and exposed to many drugs particularly anticholinergic drugs and those on Beer's list.**

Screening for Delirium in the context of cognitive impartment

SCREENING FOR DELIRIUM A-FACT

Acute – onset

Fluctuation – course

Attention - ↓ concentration

Consciousness - ↓ level

Thoughts – disorganized

SCREENING FOR DELIRIUM - CAM

Feature 1: Acute onset and fluctuating course

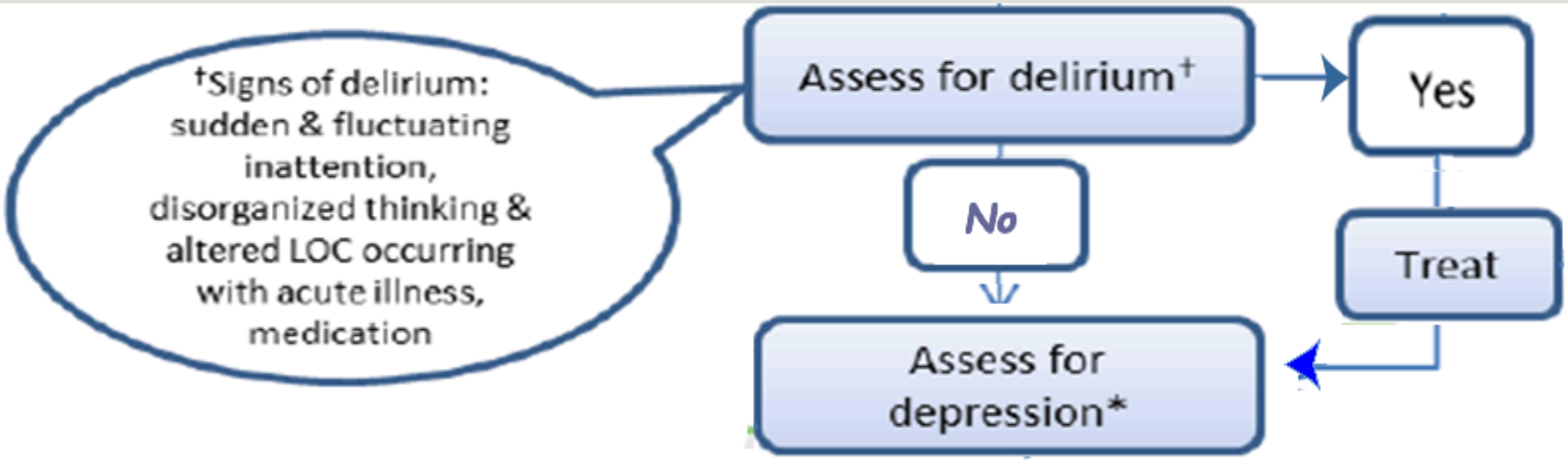
Feature 2: Inattention

Feature 3: Disorganized thinking

Feature 4: Altered level of consciousness

If features 1 and 2 and either 3 or 4 are present (CAM +/positive), a diagnosis of delirium is suggested.

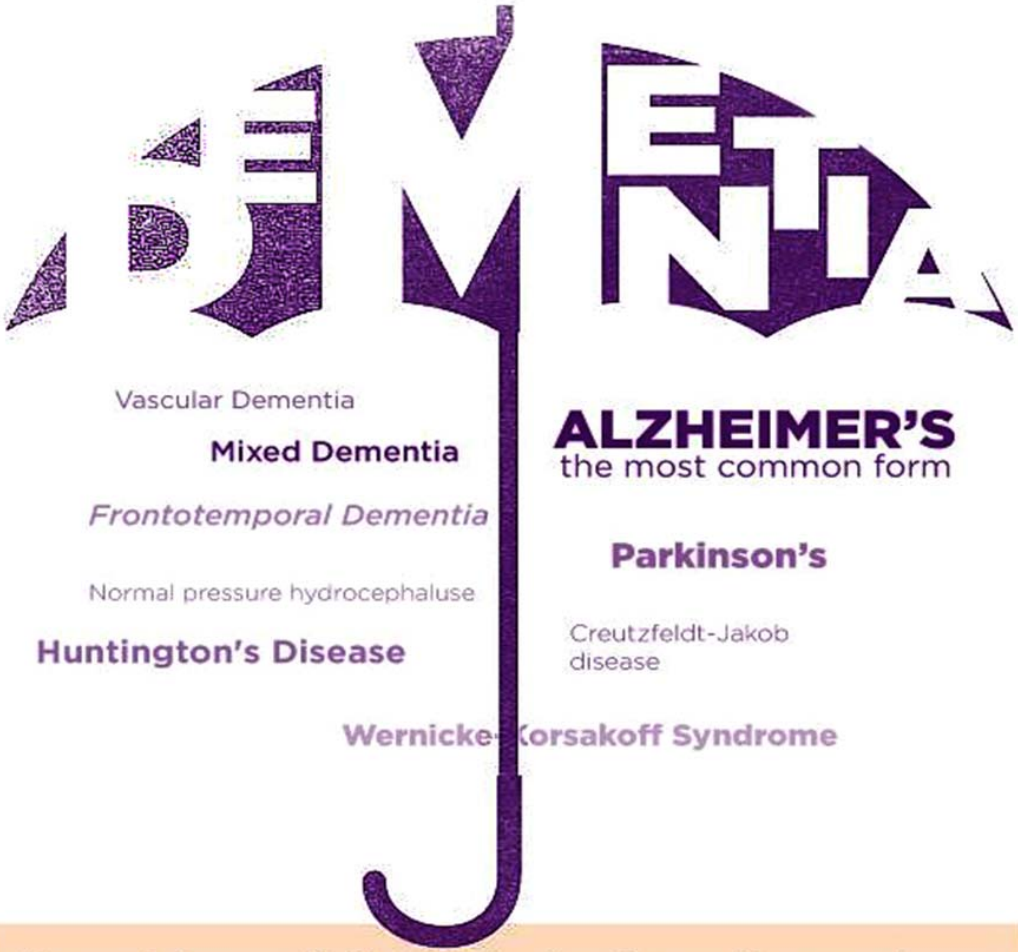
Delirium


†Signs of delirium: sudden & fluctuating inattention, disorganized thinking & altered LOC occurring with acute illness, medication
Assess for delirium†
Yes
No
Treat
Assess for depression*

Fact 5

- **Alzheimer's Disease, Vascular Dementia and mixed AD/ VAD are the most common in older persons accounting for 50-70% of cases.**
- **Next in frequency are DLB (Lewy-Body), PD (Parkinson's Dementia) and FTD or FTLD (Fronto-Temporal Lobar Dementia- previously Pick's Disease).**
- **NPH and HD are infrequent.**

What's the difference between **ALZHEIMER'S** and **DEMENTIA?**



Dementia is an umbrella term that describes a wide range of symptoms including memory loss and mental decline. Alzheimer's is the most common form of dementia, but there are many others. **Learn more at alz.org/relateddementias**

Differentiating between Dementias

Alzheimer's disease often shows a progressive and somewhat predictable decline.

Function and cognition in Lewy body dementia may deteriorate faster than other forms and may respond better to cholinesterase inhibitors

Frontotemporal dementias often occur in younger individuals and present with language and behavioral problems that later progress to dementia

Vascular dementia may be stable for a long time and deteriorate rapidly following a new vascular event.

Types of dementia in old age

	Range	✶
Alzheimers	40-50	47.2
Vascular	10-20	8.7
Lewy Body	2.5-25	2.5
Mixed	10-20	18.7
FTD	5%	5.4
Other	10-15	15

✶ Accord Study Feldman 2002

Fact 6

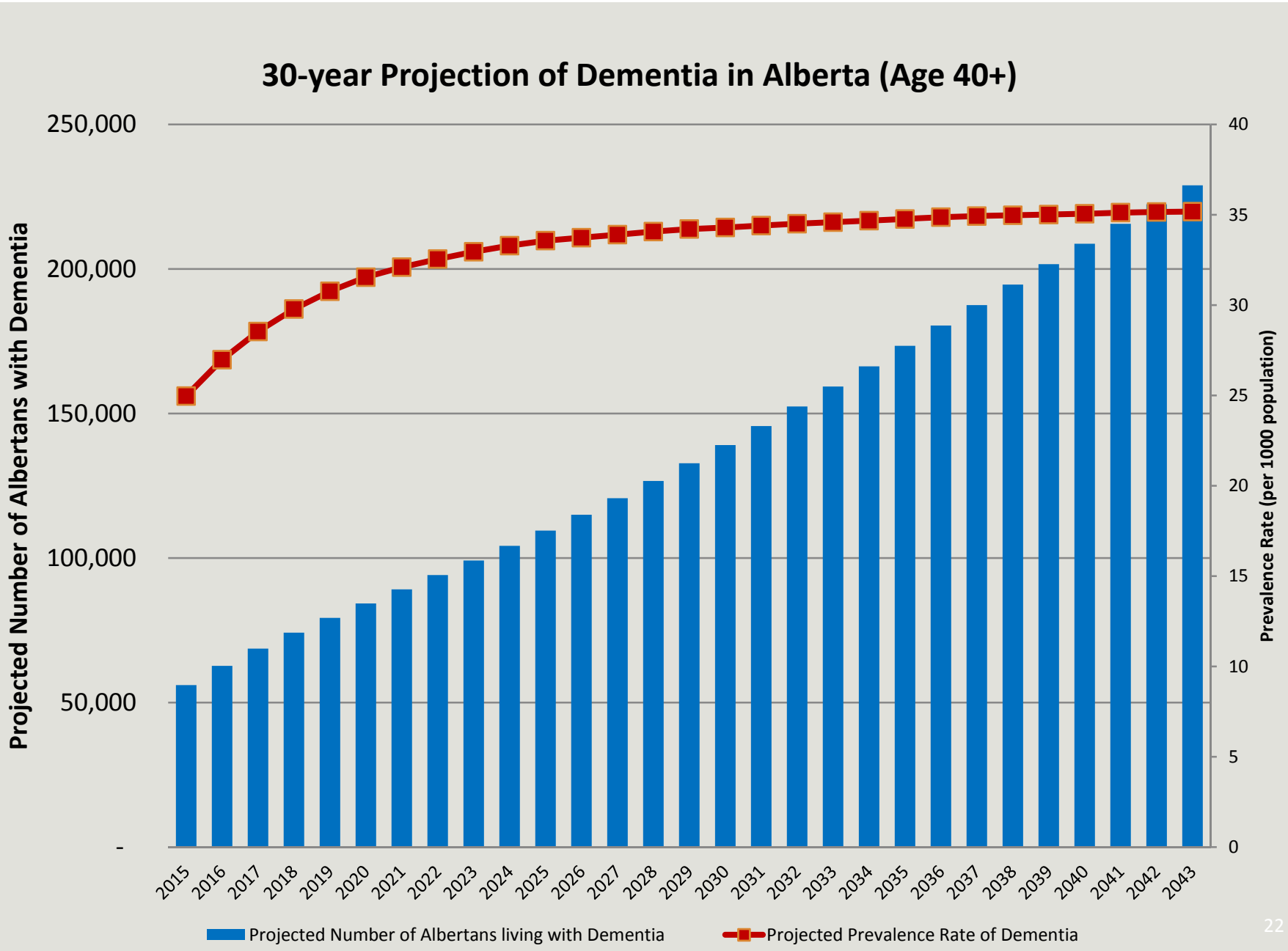
- **Most AD is sporadic. Between 5-10% of AD is familial.**
- **Even monozygotic twins are not 100% concordant at time of diagnosis.**
- **Having a close family member with dementia increases risk of developing AD**

Fact 7

Other risk factors for Dementia include age, low level of formal education, vascular risk factors and head injury. Physical activity may be protective.

While not "normal aging", dementia prevalence increases with advancing age.

- <65<1%:
- 65 and over 8-10%:
- over 85- 25-35%
- By 2043 the number of persons living with dementia (PLWD)in Alberta will quadruple


30-year Projection of Dementia in Alberta (Age 40+)
Projected Number of Albertans with Dementia
250,000
200,000
150,000
100,000
50,000
-
Prevalence Rate (per 1000 population)
40
35
30
25
20
15
10
5
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
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2037
2038
2039
2040
2041
2042
2043
Projected Number of Albertans living with Dementia
Projected Prevalence Rate of Dementia

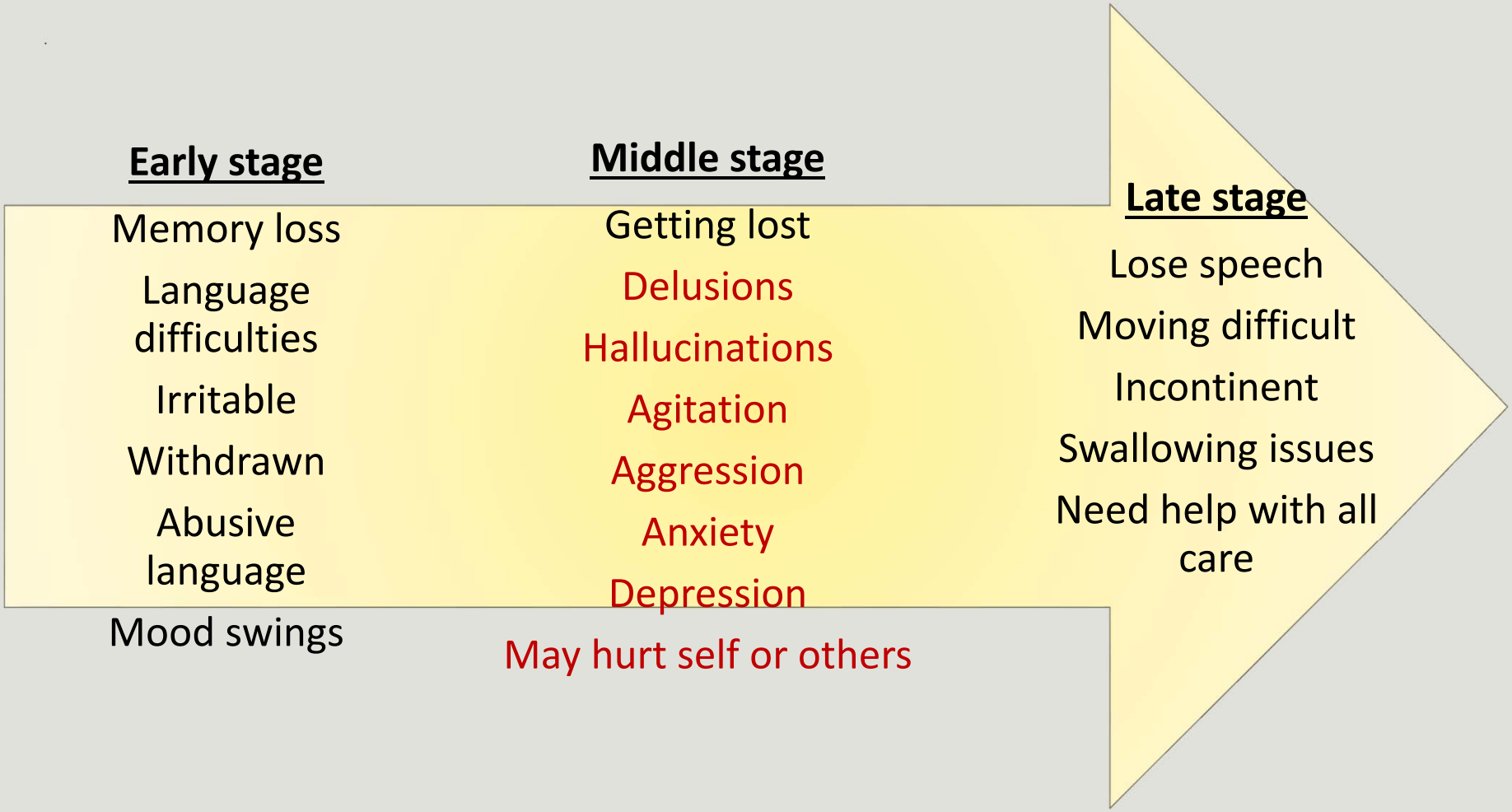
Fact 8

- **Currently there is no drug to prevent or reverse dementia. Available drugs *may help some patients, with some symptoms for some time* and a trial is worth considering if there are no contraindications.**
- **There are many treatments under investigation that affect beta amyloid metabolism, Tau protein, nerve growth factors and CNS inflammation.**

Fact 9

- **Most forms of dementia are progressive and often PLWD are undiagnosed until a health crisis occurs affecting themselves or their care-partners.**
- **Timely diagnosis and individualized care planning and support can improve or maintain their health and functional abilities and quality of life for the person, their care-partners and support network and avoid potentially disabling hospital admissions.**

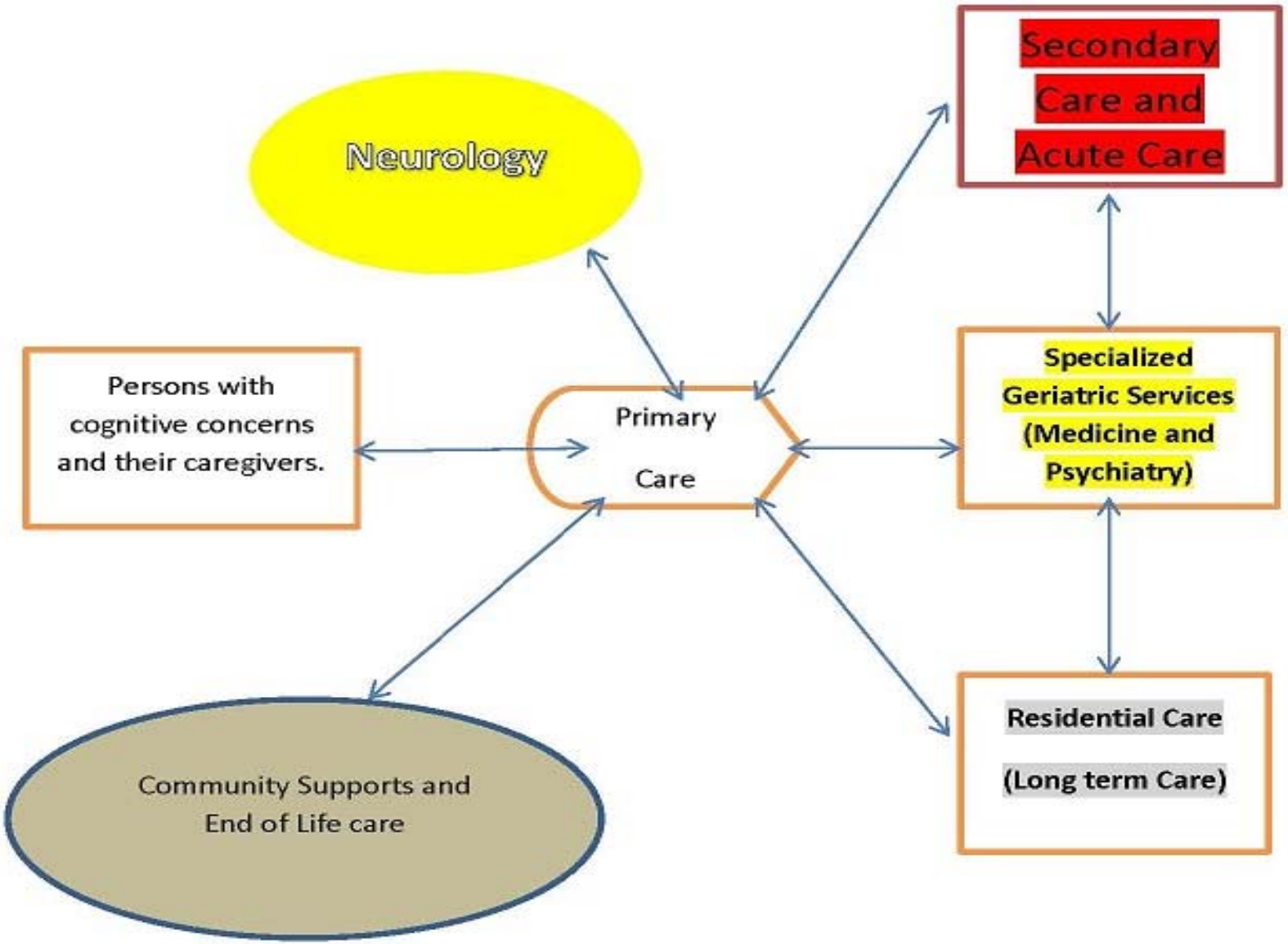
Expected Progression of Dementia



Fact 10

Complex multi-morbidity and frailty often coexist with dementia. Uncoordinated, fragmented care by multiple providers may result in avoidable crises and hospital admissions and caregiver distress.

Primary Health Care plays a critical role in recognising & managing dementia, multimorbidity & frailty in the community and, with the support of specialized services, case-finding individuals at high risk and providing timely diagnosis of dementia.


Secondary
Care and
Acute Care
Neurology
Persons with
cognitive concerns
and their caregivers.
Primary
Care
Specialized
Geriatric Services
(Medicine and
Psychiatry)
Residential Care
(Long term Care)
Community Supports and
End of Life care

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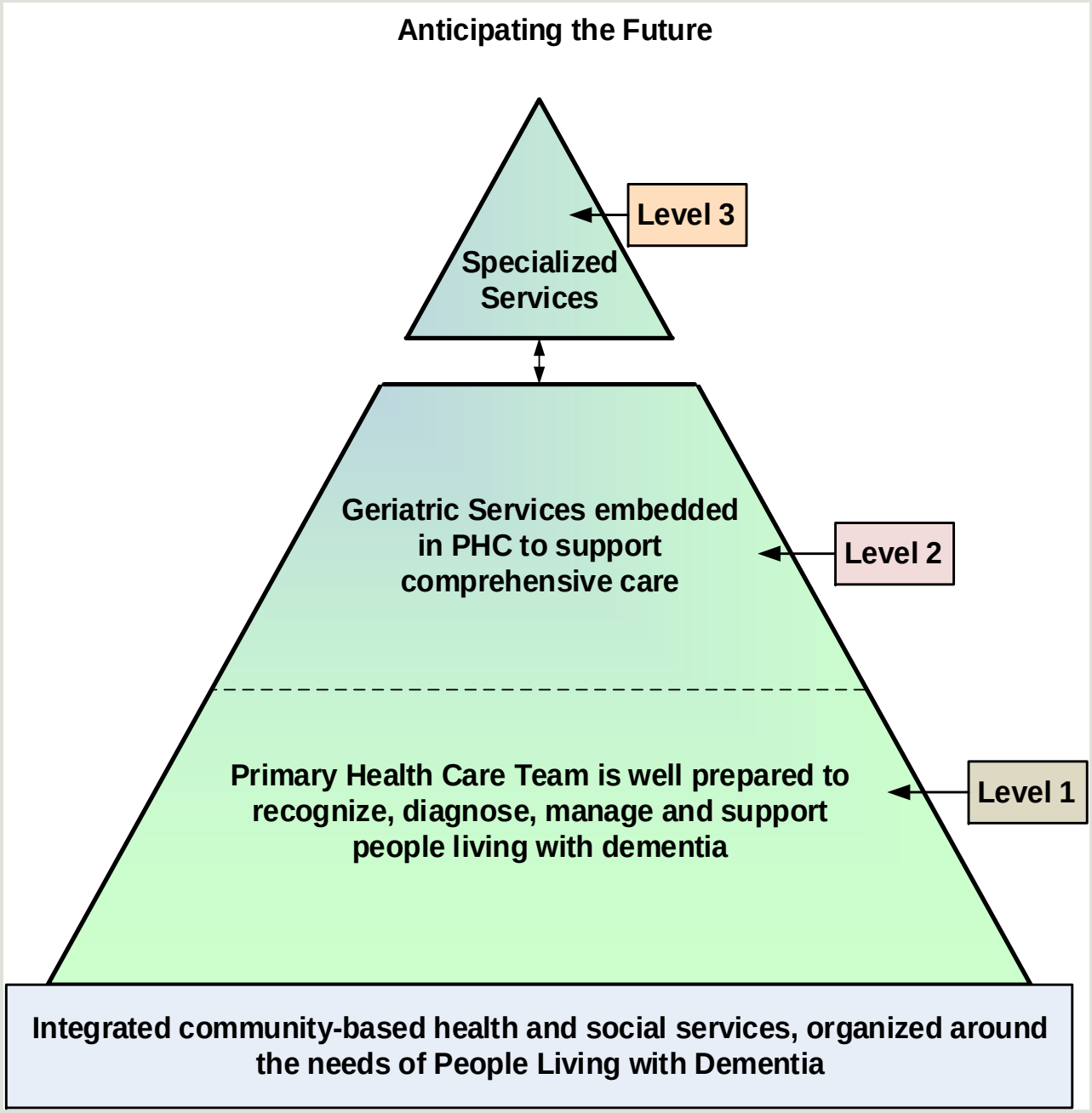
Anticipating the Future
Level 3
Specialized Services
Geriatric Services embedded in PHC to support comprehensive care
Level 2
Primary Health Care Team is well prepared to recognize, diagnose, manage and support people living with dementia
Level 1
Integrated community-based health and social services, organized around the needs of People Living with Dementia

AMA/TOPS Cognitive Impairment

Symptoms to Management –Summary (1)
Symptoms to Diagnosis (2)
Diagnosis to Management (3)
Services, Resources , Tools and Tips (4)

http://www.topalbertadoctors.org/download/2112/Cognitive%20Impairment-Summary.pdf?_20171103174335

http://www.topalbertadoctors.org/download/2110/Cogn%20Imp%201-Symptoms%20to%20Diagnosis.pdf?_20171103175227

http://www.topalbertadoctors.org/download/2111/Cogn%20Imp%202-Diagnosis%20to%20Management.pdf?_20171103175342

http://www.topalbertadoctors.org/download/2113/Cogn%20Imp-Resources%20&%20Future%20Planning.pdf?_20171103175415