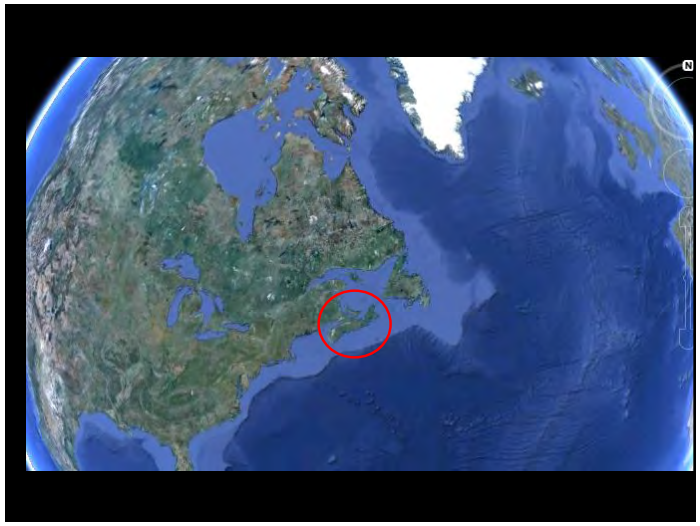
11th Annual IRCP Conference

Melbourne, 13 – 15th October, 2015

Prehospital Care is Dead – Long Live Prehospital Care!

Ron Stewart OC
Professor, Dean of Medical Humanities,
Dalhousie University, Canada
Hero of Emergency Medicine, ACEP

Frank Archer OAM
Emeritus Professor, Monash University, Australia
Non-Executive Director, Board Member,
Eastern Melbourne Medicare Local



Preparing ourselves for the death and resuscitation of "Pre-hospital" Care

Think about…

beginnings…

'Prehospital Care' – Birth notice

- Difficult to establish with accuracy
  - Father – Ron Stewart – "Not sure"
  - Sibling – Walt Stoy – "not clear"
  - Storyteller – James Magenza – "Don't know"
  - EMS Agenda for the Future 1996 – not defined

Undeniable influences…

Advent of scientific medicine…


ACCIDENTAL DEATH AND DISABILITY:
THE NEGLECTED DISEASE
OF MODERN SOCIETY

Prepared by the
COMMITTEE ON TRAUMA AND COMMITTEE ON SHOCK
DIVISION OF MEDICAL SCIENCES
NATIONAL ACADEMY OF SCIENCES
NATIONAL RESEARCH COUNCIL

NATIONAL ACADEMY OF SCIENCES — NATIONAL RESEARCH COUNCIL

Research…


The Lancet · Saturday 5 August 1967

A MOBILE INTENSIVE-CARE UNIT IN THE MANAGEMENT OF MYOCARDIAL INFARCTION

CRUCIAL BREAKTHROUGH..

Emergency Medicine accepted as a specialty 1979 (USA) AND 1984 (Canada)

...and EMS as a sub-specialty in 2010

...and rise of 'sibling' organisations as well

'Prehospital Care' – Birth notice

- Conceived by the 'union' of:
  - "Accidental Death and Disability the Neglected Disease of Modern Society" National Research Council USA 1966 (trauma father)
  - "Mobile Intensive Care Unit in the Management of Myocardial Infarction" Lancet UK 1967 (cardiology mother)
- 'Bastard child' of Emergency Physicians (USA) and the US DOT – 1970's ?
- Adoption of the term 'Paramedic' in Australia formally announced by CAA in 1996

Prehospital Care: Neonate

- Goals of an EMS System
  - To get the right response
  - To the right patient
  - In the right timeframe
  - With the right decisions on initial care and destination
  - To obtain the best outcome for the patient
  - In a cost-efficient & co-ordinated manner, &
  - To do it better next time.

Prehospital care: Infancy

Where we are

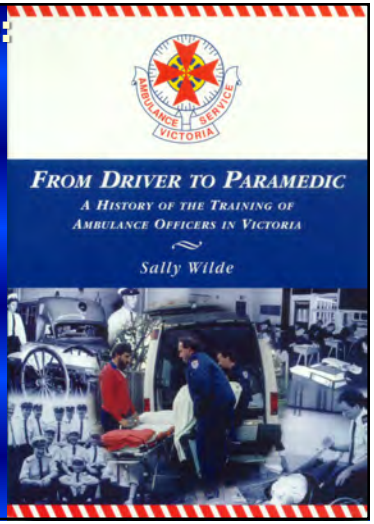
Where we want to be

How to get there

(NHTSA, 1996)

Prehospital care: development years

A change in emphasis from "transport" to "Professional health care"



Prehospital care: adolescence

- Adolescence is that period when:
  - one is looking for self actualisation' – 'self identity'
  - One experiences / experiments with different models of life
- And so with prehospital care adolescence
  - Different **models** of exploring the future have emerged

Models of Prehospital Care

Emerging models of Prehospital Care:

- Current ambulance model
- Public sector model
- Private sector model
- Mixed public/private sector model
- Chain of survival model
- Trauma systems model
- Public safety model
- Public health model
- Public health crisis model
- Social support/ welfare model
- Shared care model
- Alternate dispositions (Pathways) models
- Expanded scope of practice /Role substitution models
- Primary health care model

So… Quo vadis…

EHS

?

Where are we going from here?

"Frequent flyers": Abusers or with "Special Needs"

- Emergency department frequent flyers: unnecessary load or a lifeline? (Fulde)
- http://www.mja.com.au/public/issues/184_12_190606/ful10325_fm.html
- The effect of multidisciplinary case management on selected outcomes for frequent attenders at an emergency department (Phillips)
- http://www.mja.com.au/public/issues/184_12_190606/phi10899_fm.html

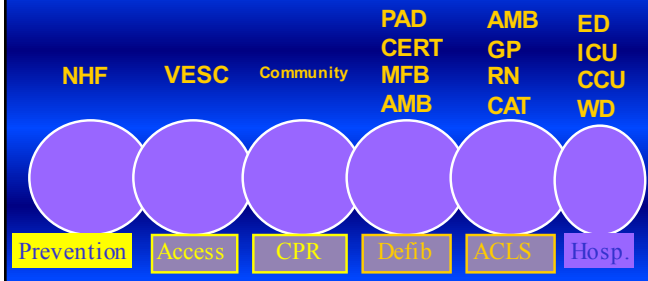
Social Support/ Welfare Model

- A new concept, not yet developed
- In response to observations: 4th highest call to MAS – "non-sick" person
- Respond to "health crises", not emergencies, acute but not life threat
  - Cultural needs differ
  - Different concepts of "emergency"
  - There is a welfare component of many ambulance calls
- Potential for "Emergency Social Work Team"? (like emergency psych teams CAT)
  - Is the current service appropriate?

Shared Care Model

- Examples:
  - General practice: practice nurses & GP's
  - Obstetrics: midwives, GP's & obstetricians
  - Mental health: psychologists & psychiatrists
  - **AV Referral Service (2008)**
- The complexity of health care and associated costs are forcing new models and partnerships:
  - Multidisciplinary, cost efficient
  - Community-based

Shared care model - 2



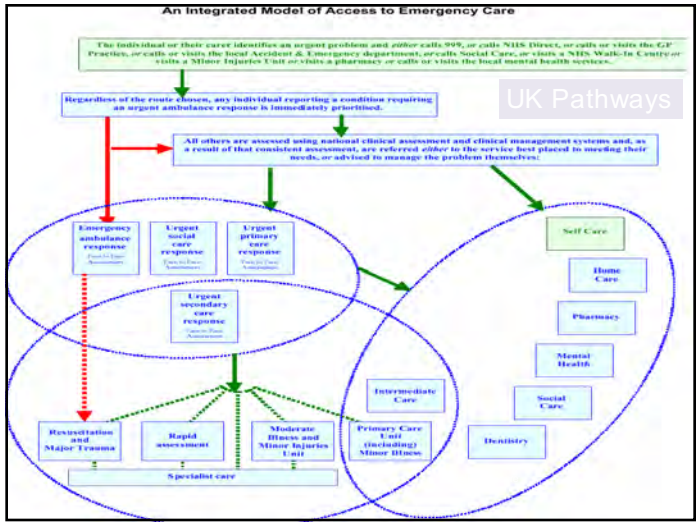
Alternate dispositions models

- Primary care partnerships – case management, mainly chronic illness
- Prevention: eg falls assessment and early intervention
- There are now others in this space –
  - Medical Assessment Teams
  - HARP program
- Self / Professional shared care
- COAG – more flexible workforce!!!!!

after hours GP helpline
healthdirect AUSTRALIA
1800 022 222

Nurse-on-call, 24hr health help line

AV Referral Service



Expanded scope/role substitution models

- Physician assistant
- Nurse practitioner
- "Paramedic Practitioner"
- Community paramedic
  - International Roundtable on Community Paramedicine http://www.ircp.info/
- Remote area Paramedic
- Industrial paramedic
- Military paramedic
- Humanitarian paramedic

What is driving this?

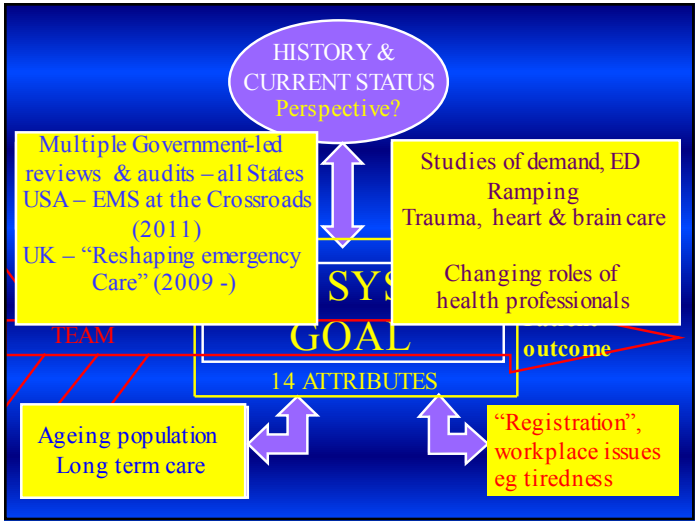
No society has ever created a health system which provides:

-EVERYTHING
-TO EVERYONE
-RIGHT NOW

You have to choose two of the three- no one can have ALL three…

So fiscal pressures will continue, unless we change the way we do things

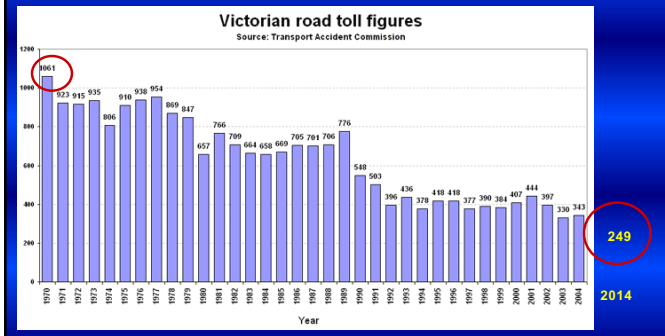
Rural realities…



Prehospital?

The end of the beginning…

Maintain & advance trauma care



Ambulance Victoria Chain of Survival (2014)

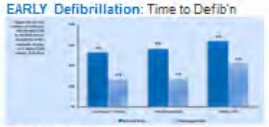
EARLY ACCESS: Response time

EARLY CPR: Bystander CPR Rate

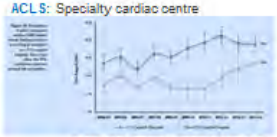
ALL LINKS:
Identify
Define
Measure
Strengthen

ADULT SURVIVAL: Shockable rhythm

EARLY Defibrillation: Time to Defib'n



ACLS: Specialty cardiac centre



MONASH University

(VACAR Annual report 2013/14)

You ARE the Safety Net…

This image cannot currently be displayed.

but …

A glimpse of the future will show...

Emergency health services will encompass much more and be more diverse....

The Health Reform of the 2000's

*Based on changes in:

- -Governance and structure
- -Emphasis- "prevention better than cure"
- -De-institutionalization
- -Reemphasis on "National Health Acts"
- -Regionalisation
- -Creation of a "safety net"- EHS- with plans for...

Australian Health Reforms

- National Preventative Health Strategy, *Australia: The Healthiest Country by 2020*
- Medicare Locals, now to be 'Primary Health Networks' – co-ordinate and purchase primary health services, improve access and outcomes
- National Health and Hospitals Reform Commission Report (2009) Commonwealth Government take responsibility for the policy and public funding of primary health care services (Ambulance is State funded)

The "Second Reform"

The Ross Report- 2011 – Canada. Similar Health system reforms in Australia, UK

The beginning of the
SECOND REFORM WAVE
requires
THE RENEWAL OF PRIMARY CARE

As a common theme in our various countries

Definition – primary care

- *Primary health care is socially appropriate, universally accessible, scientifically sound first levelcare provided by health services and systems with a suitably trained workforce comprised of multi-disciplinary teams supported by integrated referral systems in a way that: gives priority to those most in need and addresses health inequalities; maximises community and individual self-reliance, participation and control; and involves collaboration and partnership with other sectors to promote public health. Comprehensive primary health care includes health promotion, illness prevention, treatment and care of the sick, community development, and advocacy and rehabilitation.*
- http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/content/nphc-draftreportsupp-toc

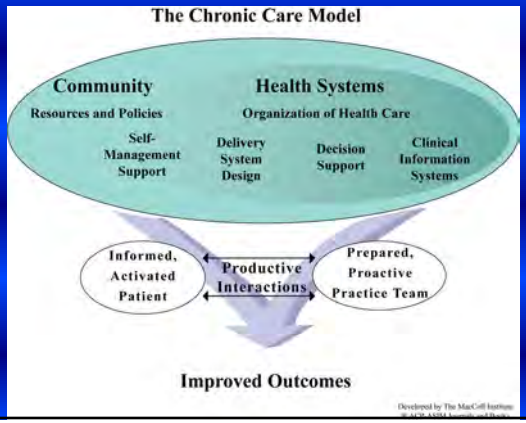
The new primary care -1

- To build such a modern primary health care system, there are 5 key building blocks:
  - Regional integration
  - Information and technology, including eHealth
  - Skilled workforce, and appropriate care
  - Infrastructure
  - Financing and system performance

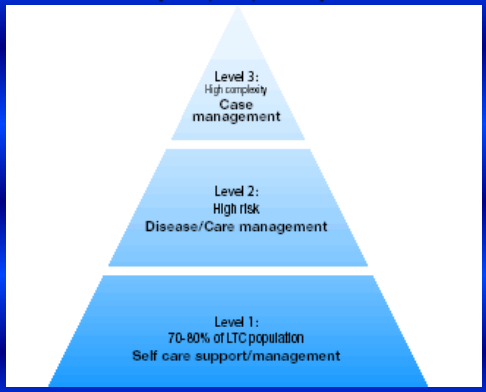
The new primary care -2

- Drawing from these are 4 priority directions for change:
  - Improving access and reducing inequity
  - Better management of chronic conditions
  - Increasing the focus on prevention
  - Improving quality, safety, performance and accountability
- **Patients assigned to 'medical homes'???**
  - **Continuity of care**

Chronic care model



Long Term Conditions Care Model
(DoH, UK, 2006)



Long Term Conditions Care Model
Supported self care (DoH, UK, 2006)

Typical ambulance service workload

- AV Statewide Road Incidents 2014 – 2015#
  - **Code 1** **331,153** (40% of total)
  - **Code 2** **191,359**
  - **Code 3** **45,705** (30% of 1, 2, 3 not t'ported)
  - **Non-Emerg** **265,136** (173,223)
  - **Total** **833,353**

Follow-up?

Code1	Major trauma*	– 2,899pa	1.7% of Code 1
	OHCA (Treated)**	- 2,772pa	

#AV Annual report 2014 – 15, * VSTORM Annual report 2013 – 2104

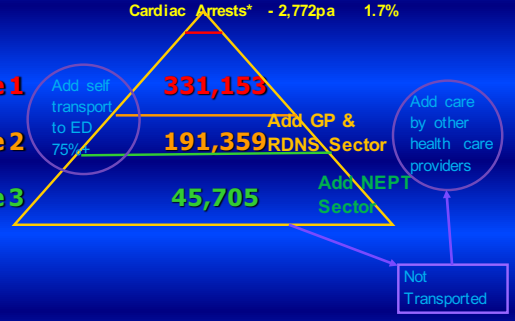
**VACAR Annual Report 2013 – 2014 (3,329 EFT clinical paramedics at AV)

Typical ambulance service workload

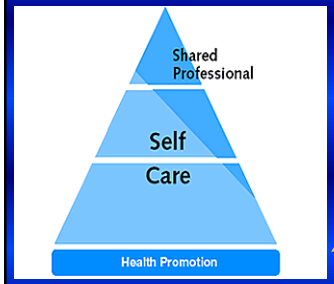
- AV 2014 - 2015

Major trauma* – 2,899pa
Cardiac Arrests* - 2,772pa 1.7%

- Code 1
- Code 2
- Code 3

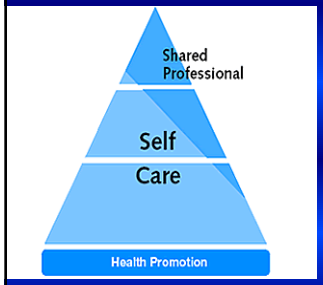


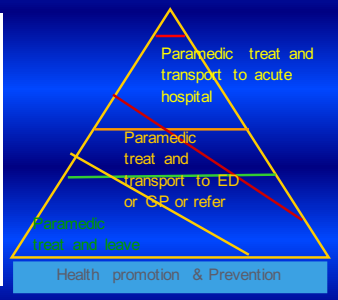
Can we find a parallel with Long Term Care model (UK)?



- Priority 0
- Code 1
- Code 2
- Code 3

Can we find a parallel with Long Term Care model (UK)?





"AV should reaffirm its role as a provider of emergency services by focusing the efforts of its direct workforce more heavily on acute patients requiring emergency pre-hospital care and transport" (AV Annual Report, 2014 – 2015)

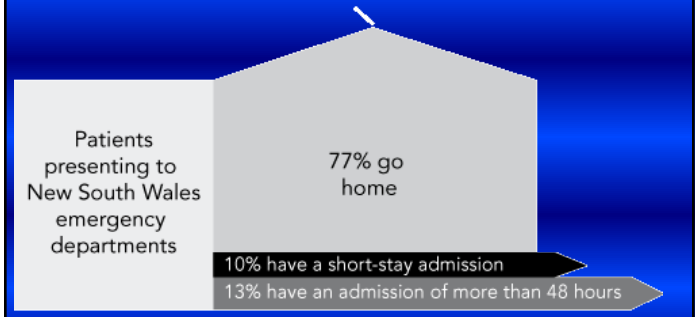
Table 8.3: Emergency department presentations, by arrival mode and triage category, public hospital emergency departments, 2012–13 (Australia wide)

Arrival mode	Triage category: Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	Total(a)
Ambulance, road/air	38,363	331,751	786,988	454,299	28,695 <2%	1,640,415
Other(b)	6,578	373,745	1,498,908	2,499,134	634,314	5,018,113
Total	45,270	713,792	2,309,336	2,969,467	668,532	6,712,224

- **25% arrived by ambulance** (road + aero-medical)
- **75% of people presenting to hospital ED's arrived by private transport**, public transport, community transport or taxis. **How many SHOULD have arrived by ambulance?**

(AIHW, 2014)

Disposition of patients from New South Wales emergency departments (O'Connell, 2008)

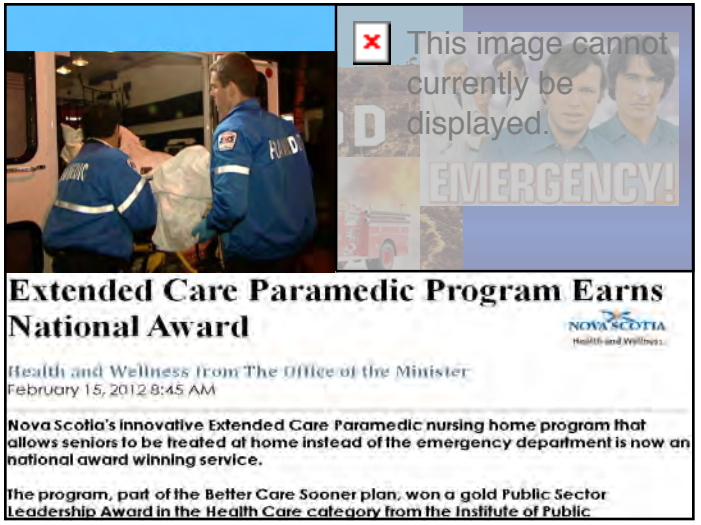


Data covers 1.7 million NSW public emergency department attendances in the 2005-06 financial year.
Source: Tony Dunn, Director, Data Analysis and Performance Evaluation Branch, NSW Health, December 2007

In summary

- Small % of ambulance workload is actual 'life threat'
- 30% of Code 1,2 or 3 are not transported, but what follow-up?
- 25% of ED attenders arrive by ambulance
- 77% of ED attenders are discharged home

The community is the 'ultimate emergency care unit' (with apologies to the past!!)



Extended Care Paramedic Program Earns National Award

Health and Wellness from The Office of the Minister
February 15, 2012 8:45 AM

Nova Scotia's innovative Extended Care Paramedic nursing home program that allows seniors to be treated at home instead of the emergency department is now an national award winning service.

The program, part of the Better Care Sooner plan, won a gold Public Sector Leadership Award in the Health Care category from the Institute of Public

Paramedics – a Global profession

London Ambulance recruiting 300 Australian Paramedics, for LAS's expanded roles

Entry level – Bachelor degree
Discipline related specialty Masters
Increasing Doctoral programs

Challenges 1

- Traditional Ambulance / EHS should relate more to Primary Health Care – not necessarily embedded in it.
  - The problem of ED 'access block' is in the community, not in the ambulance service
  - **The community is the ultimate 'emergency care unit' (with apologies to the past…)**
  - **Establish a research focus on 'unscheduled (urgent) community-based primary health care (with the same resources and enthusiasm as the trauma, cardiac registries)**

Challenges 2

- **A sustainable model, crafted within primary health care, is required to structure and develop Community-Based Emergency Health (CBEH)**
  - Acknowledge and support the key role of GP's
  - Understand and develop an appropriate funding model within our respective National health systems
  - **THE IRCP IS WELL POSITIONED TO LEAD THE DEVELOPMENT OF AN INTERNATIONAL MODEL**
    - Synthesise a model from your current efforts
    - Form a committee, fund a contract , eg the development of the EMS Research Agendas (USA, Canada)

Challenges 3

- Within this (eventual) model, there will be (are) 'lots' of opportunities for the Community Paramedic – an exciting time!!
  - But, **outside the traditional ambulance / EMS / EHS system, but complementary to them**
  - The fundamental key to the evolution of the community Paramedic in a model of CBEH is **PROFESSIONAL REGISTRATION.**
    - The IRCP is well positioned to effectively lobby for this objective and
    - To aim for international reciprocal recognition

Challenges 4

- Re-develop multi-disciplinary education programs to meet the needs
  - Attitudes to this emerging context
  - Community education and support
- The IRCP is well positioned to effectively lobby and lead this objective
  - The International Masters in Emergency Primary Health Care

Daniel Spaite

- Controversy:
  - Does 'Prehospital care ' have no hyphen or 1 hyphen as in 'Pre-hospital care'?
- Controversy solved:
  - It has 2 hypyens
  - As in 'Out-of-hospital care'
- I prefer "Community-based Emergency Health' (CBEH)or "Emergency Primary Health Care"

"We are witnessing our EHS world changing; as leaders and clinicians-in-the-trenches we need not only to anticipate change, but also to encourage it through research and solid educational methods and curriculum content reflecting evidence-based practice. Pre-hospital care, as we know it, is but a part of how EHS can contribute to the welfare of our citizens and ourselves. We are indeed seeing an end…and in that, is our beginning."

Ron Stewart, IRCP Conference, Melbourne 2015

Thank you

We can't- we
mustn't -FAIL…
Failure can't be an option…

Sooooo much