AUSTRALIA & NEW ZEALAND ARE WORLD LEADERS IN INTENSIVE CARE MEDICINE AND RESEARCH



#### MISSION STATEMENT

The purpose of the Intensive Care Foundation is to improve the care, treatment and quality of life of critically-ill people in Australia and New Zealand through:

- providing research grants for projects in areas of intensive care and critical illness or issues related to those subjects, and
- promoting awareness and education in the general community about intensive care and critical illness or issues related to those subjects
- delivering high quality professional training and education to intensive care staff.

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# IMPROVING THE OUTCOMES FOR CRITICALLY ILL PATIENTS BY FUNDING RESEARCH AND SUPPORTING EDUCATION

- Since it's inception in 1990 the Foundation has awarded over \$4 million to fund 120 research projects
- Every dollar that is donated to the Intensive Care Foundation goes to supporting our research grants and philanthropic programs

We represent the Intensive Care Community as a whole – rather than a location, hospital, segment or community – in both Australia and New Zealand.

The Foundation seeks input and representation from all "on the ground" Intensive Care practitioners – doctors, nurses, specialists, administrators and managers.

We are recognised as the initial or "seed funding" research provider of choice:

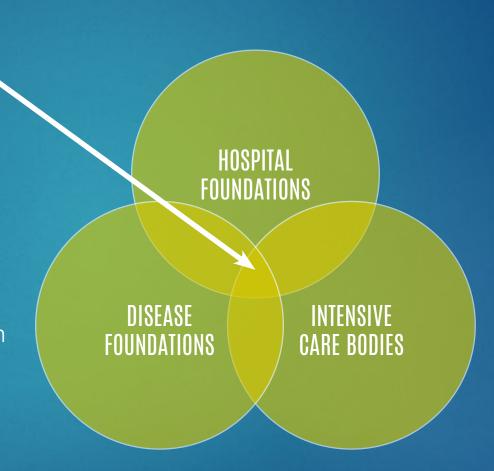
- Funding for pilot studies and pre-clinical trials is difficult to obtain elsewhere.
- Young investigators given a chance to establish a profile and track record.

The Foundation has funded pilot studies that have gone on to receive very significant funding from Government and the Corporate Sector.

Also we are the only granting body devoted to support Intensive Care trials.

#### WHERE DOES THE FOUNDATION FIT?

- We provide "seed" funding
- We underwrite medical trials
- Also we fund research in critical areas that are not disease specific – eg infection, nursing care
- We have the ability to collaborate with partner organisations such as the Victorian Traffic Accident Commission (TAC)



# STRATEGIC PRIORITIES THE AUSTRALIAN AND NEW ZEALAND INTENSIVE CARE FOUNDATION

- The ICF is committed to robust and resilient governance and compliance processes, from both a medical and NFP regulatory perspective
- The Board of Directors of the ICF is made up of senior medical and nursing (7) and corporate members (4) who donate their time and expertise
- An Independent Scientific Committee, with representatives of the ICU community, responsible for reviewing Research Grant Applications and advising the Board on the selection of research projects for funding
- The ICF is funded by the Intensive Care Community, so all our operating costs are covered. This means that every dollar that is donated to the Foundation goes to support our philanthropic programs

#### THE GRANTS PROCESS THE AUSTRALIAN AND NEW ZEALAND INTENSIVE CARE FOUNDATION

• Expressions of Interest (EOIs) invited **MARCH** • EOIs blind assessed by Scientific Review Committee (SRC) **APRIL** Successful EOI applicants invited to make full Application by 30 May
Unsuccessful advised MAY • Invited Applications allocated by ICF to > 40 specialist volunteer reviewers JUNE/ for blind assessment JULY Top 50% of Applications sent to SRC for unblinded review
SRC teleconference meeting to make final Grant recommendations **AUGUST** • ICF Board meets to review SRC recommendations and decide on Grants to be awarded SEPT • ICF Grants announced at ANZICS/ACCCN Conference

**OCTOBER** 

# OUR STAKEHOLDERS THE AUSTRALIAN AND NEW ZEALAND INTENSIVE CARE FOUNDATION

The ICF is proud to be supported by three large medical and nursing founding member organisations:

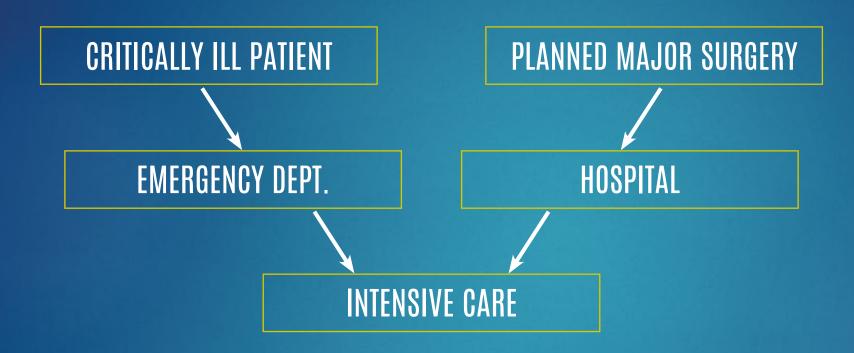
- College of Intensive Care Medicine (CICM)
- Australian and New Zealand Intensive Care Society (ANZICS); and
- Australian College of Critical Care Nurses (ACCCN)

These organisations participate in the distribution of our communiques to more than 1,355 intensive care doctors and 14,250+ critical care nurses.

AUSTRALIANS AND NEW ZEALANDERS HAVE A
ONE IN TWO CHANCE OF BEING ADMITTED
TO AN INTENSIVE CARE UNIT SOME TIME
DURING THEIR LIFE TIME

This affects the lives of **every** Australian and New Zealander at some time

# WHAT IS INTENSIVE CARE IN AUSTRALIA AND NEW ZEALAND



- 10-15% hospital patients need vital organ support.
- Many could not survive without it.

### SNAPSHOT OF INTENSIVE CARE SERVICES IN AUSTRALIA AND NEW ZEALAND IN 2019

- 219 hospitals providing ICU services, with 221 adult & paediatric ICUs
- 138 Public Hospital ICUs, 80 private Hospital ICUs, 3 ICUs under public/ private arrangements
- **2,500** available adult and paediatric ICU beds
- 180,000 admissions to adult ICUs, increasing by 6% per year
- 20,000 admissions to paediatric ICUs, increasing by 4% per year
- **1,355** specialist doctors
- Approx. 14,250 specialist nurses staffing ICUs

## INTENSIVE CARE UNITS (ICU) ARE LOCATED JUST ABOUT EVERYWHERE...



# STRATEGIC PRIORITIES FOR INTENSIVE CARE IN AUSTRALIA AND NEW ZEALAND

#### IMPROVED PATIENT SURVIVAL RATES

- Survival rates have increased from 80% in the 1990s to more than 90% in recent years
- We must continue to research better ways to treat and care for the most seriously ill patients

## WHAT IS INTENSIVE CARE IN AUSTRALIA AND NEW ZEALAND

#### IMPROVED SURVIVORS' QUALITY OF LIFE

- A success story of modern medicine
- The safety valve in every hospital for critically ill patients
- The Intensive Care Unit provides care to patients who are very sick, either due to acute illness, following major surgery or after an accident
- All patients are cared for by health care workers who are highly skilled and have specialist training

## WHAT IS INTENSIVE CARE IN AUSTRALIA AND NEW ZEALAND

#### IMPROVE SURVIVORS' QUALITY OF LIFE (CONT.)

- Many patients return home but struggle with persisting physical weakness and emotional trauma that can make returning to work and independent living very difficult
- Ongoing research is needed in the areas of increasing mobility and minimising sedation for patients in ICU

# THE IMPORTANCE OF CLINICAL RESEARCH FOR INTENSIVE CARE IN AUSTRALIA AND NEW ZEALAND

#### CLINICAL RESEARCH IS VITAL, IT HELP US:

- Learn about the causes of different critical illnesses and their effects on patients,
- Find therapies that help save lives and improve the quality of life of survivors,
- Determine if therapies used on one condition can be used on others,
- Find the most effective ways of delivering care to the critically ill,
- Ensure that future critically ill patients receive the best possible care

### FOUR SUCCESS STORIES OF INTENSIVE CARE RESEARCH THAT WAS FUNDED BY THE FOUNDATION

#### 2011 The PRICE Study - Dr Shailesh Bihari

Post Resuscitation fluid boluses In severe sepsis or septic shock prevalence and Efficacy (PRICE study) 'I received a novice research grant from the Foundation early in my research career. Not only did this "kick start" my research career, it also paved the way towards my achieving an NHMRC E only career Fellowship and contributed to my PhD'.

Dr Shailesh Bihari, Adelaide

#### 2014 The CASCADE Project - Professor Marion Mitchell

The Central venous Access device SeCurement And Dressing Effectiveness trialled four different methods of central venous access device [CVAD] securement and dressings and evaluated patient outcomes in adult ICU patients. An interdisciplinary team led by nurse researchers, included a microbiologist, biostatistician, infection control consultant, ICU clinical nurses and intensivists. ICU patients and their families generously consented to trialing the different securement devices which included innovative techniques.

Receiving the Intensive Care Foundation Grant was instrumental in our success in gaining a hospital foundation grant that supported additional cost effectiveness evaluations- an important component of any clinical intervention.

The intensive Care Foundation grant has allowed project team members to demonstrate their ability to successfully complete a complex intervention study within the intensive care environment, specifically in the area of reducing CVAD failure. This was the first pilot RCT examining the feasibility and effectiveness of usual CVAD securement and dressing, in comparison with three innovative methods in general ICU adult patients. Completion and publication of this project has supported subsequent grant successes. We are extremely grateful to the Intensive Care Foundation for their support that enabled this project to be undertaken.

# FOUR SUCCESS STORIES OF INTENSIVE CARE RESEARCH THAT WAS FUNDED BY THE FOUNDATION

#### 2015 The SWEET-AS randomized controlled study - Dr Yasmine Ali Abdelhamid

Patients who survive admission to the Intensive Care Unit (ICU) frequently experience long-term physical and psychological complications – the so-called 'post-intensive care syndrome' ICU survivors with comorbidities, such as diabetes, are at particularly high risk of long-term complications and cost of ongoing healthcare for these patients is substantial.

Follow-up clinics after ICU admission have been proposed as a potential way to improve outcome for ICU survivors, but studies have demonstrated limited benefit. However, existing trials have evaluated heterogeneous cohorts and utilized physicians who had limited training in outpatient care. The aim of this randomized controlled blinded pilot study was to evaluate the effects of a 'shared- care' intensivist-endocrinologist clinic for ICU survivors with type 2 diabetes on process measures and clinical outcomes at 6 months after hospital discharge and to evaluate the feasibility of conducting a larger trial.

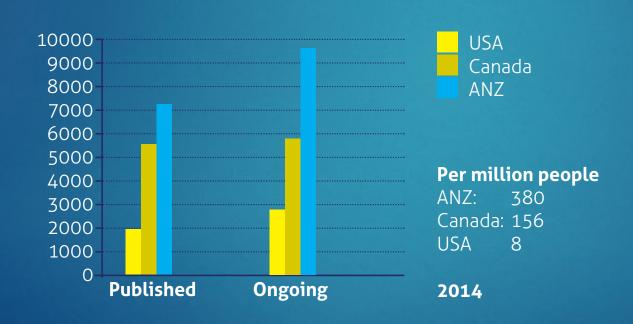
#### 2015 The PARTNER Project - Ass/ Professor Fenella Gill

The PARTNER Project revealed that adding a process to a paediatric hospital rapid response system to enable families to be involved in recognizing and responding a clinical deterioration is a complex intervention. Several barriers to effective implementation of the process existed and included a low level of parent and staff awareness, concern about over use and possible inappropriate calling by parents. Post reimplementation, further barriers were identified. Bypassing traditional hospital culture and hierarchy to escalate care for clinical deterioration remains daunting for parents and for nurses. A feature of this project was not only the inclusion of parents and consumers, but children themselves in the data collection.

Involving families in calling for help sounds a simple concept, but the research highlighted the need to not just focus on family involvement in clinical deterioration but families to be genuinely involved in the care of their child as a routine at all levels.

# ABOUT INTENSIVE CARE RESEARCH INTERNATIONAL COMPARISON

Australian and New Zealand critical care researchers are better at the big trials than anyone else – more patients in multicentre, investigator led, nonpharmaceutical intensive care trials both in real terms and per capita than in North America.



# SOME OF OUR INTENSIVE CARE SUCCESS STORIES

#### Ian "Molly" Meldrum

Pop music legend

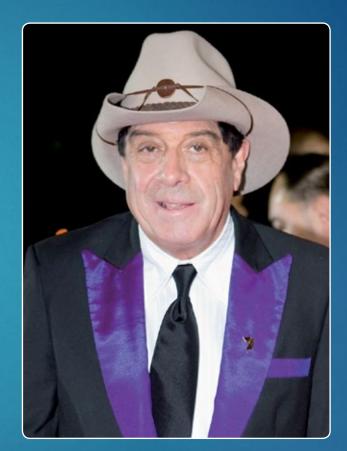
"Life can change in the blink of an eye. Or, in my case, with a fall from a ladder.

One minute, I was getting ready for a Christmas party; the next, I was in intensive care at the Alfred Hospital. I've woken up with a headache after a few parties, but never like this.

Intensive care is aptly-named. I can't remember much of it, but the fact that I'm still standing – and feeling great – is testimony to the treatment I received.

I urge everyone to support the Intensive Care Foundation.

Do yourself a favour – and look after yourself."



# SOME OF OUR INTENSIVE CARE SUCCESS STORIES

#### Mr John Mullen

Chairman - Telstra Ltd

"One day in the Christmas break I experienced a minor injury that I thought would go away but it did not. Instead, the minor issue transformed itself into a major problem. I ended up in an ambulance on the way to hospital in Sydney with a ruptured artery and massive internal bleeding and came extraordinarily close to losing my life.

I do not remember everything about the incident but I do remember the impact that this had on my family when they prepared for the worst and above all I remember the unbelievable skill, determination and



kindness of the Intensive Care staff [in Sydney] who fought to keep me alive. Without their tireless efforts and a few weeks in hospital in their care, I absolutely would not be here to write this."

# SOME OF OUR INTENSIVE CARE SUCCESS STORIES

#### Constanza

An expecting mother

Constanza is a prime example of how serious life-threatening illness can strike anyone at any time. A young, fit woman eager to meet her first baby, instead wound up hooked to a breathing machine struggling to survive.

Swift action from hospital staff saved her life after a massive clot filled her heart chambers during childbirth.

"I never thought I would end up in ICU on a breathing machine struggling to survive." Constanza said.

"It makes you realise it can happen to anyone whether you are young or old."





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