

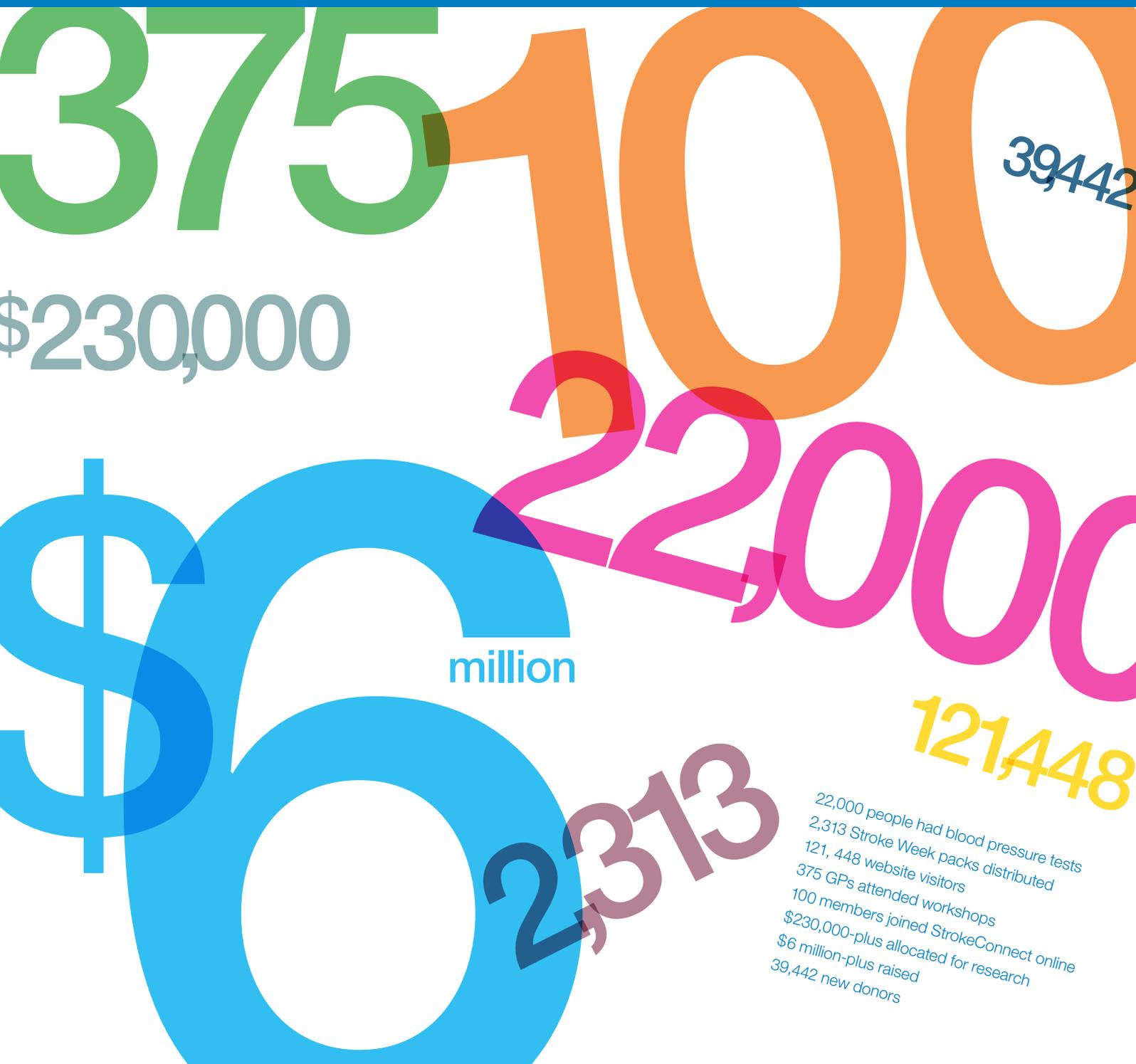


strokefoundation

Stop stroke. Save lives. End suffering.

# National Stroke Foundation 2009 Annual Review

The stroke story in facts and figures



- 22,000 people had blood pressure tests
- 2,313 Stroke Week packs distributed
- 121,448 website visitors
- 375 GPs attended workshops
- 100 members joined StrokeConnect online
- \$230,000-plus allocated for research
- \$6 million-plus raised
- 39,442 new donors



**“...like you,  
I want to make  
a significant  
difference.”**

– Professor Richard Larkins

## From the President

It was with great excitement that I accepted the position of President of the National Stroke Foundation last October – excitement because like you, I want to make a significant difference in the fight against the second leading cause of death in Australia.

I was particularly pleased to be asked to be President as I was associated with the precursor of the Foundation in its formative years in the 1980s, under its very active Patron, the late Sir John Holland, and its visionary founder, renowned neurosurgeon, Mr David Brownbill.

Today, the National Stroke Foundation with support from volunteers, stroke survivors and carers, governments, the health sector, business and the community, contributes to the development of health policies, helps to educate the medical profession, raises awareness of stroke in the community and supports research.

I hope that my experience in medical practice, health policy, education, scientific research and administration, combined with the expertise of other Board Directors can assist management

and volunteers to deliver more effective prevention, treatment and rehabilitation for stroke and increase the support for research.

I have been enormously impressed by the growth of the Foundation and its excellent work over the past several years. I would like to commend Dr John Lill for his outstanding contribution as President for that time, Bill Forrest for his excellent stewardship as Interim President and the other members of the Board. I would particularly like to congratulate the Chief Executive Officer, Dr Erin Lalor and her staff on their outstanding work.

The Foundation is enormously dependent on support from volunteers and donors. I thank and congratulate everyone who has contributed to the Foundation in these ways. You are making a real difference to people with stroke and their families.

What I have learnt about the National Stroke Foundation makes me proud of the Foundation’s achievements, and even more excited about the future of our organisation. There is so much more that can be done and that needs to be done.

President  
Professor Richard G. Larkins AO



**“Welcome  
to our new  
look Annual  
Review.”**

– CEO, Dr Erin Lalor

## From the Chief Executive Officer

Welcome to our new look Annual Review. Our new format lists the issues Australia faces and our responses as we meet the challenge of stroke. Where possible we have focused on numbers and outcomes in the areas of prevention and awareness, stroke services, fundraising, life after stroke, research and governance. This is a summary and there is more information on our website, [www.strokefoundation.com.au](http://www.strokefoundation.com.au) plus printed materials that can be supplied to groups and individuals.

We have achieved a great deal in 2009, but still too few Australians know what causes a stroke, how to recognise the symptoms and what to do. The numbers however show that we are alerting people to the importance of monitoring their blood pressure, recognising the signs of stroke and taking immediate action.

Our audit of stroke services in Australian hospitals showed that in some areas, there has been little or no improvement since the first audit conducted in 2007, and in some cases the quality of stroke treatment has deteriorated. However the number of dedicated stroke units has increased. Hospitals responded well to our audit and there has been a strong pick-up within the medical profession of our published clinical

guidelines, which are being updated in 2010.

Those who have suffered a stroke and their carers still find it difficult to connect with the services they need when they leave hospital but they are welcoming our establishment of programs that provide individual and group support.

Implementation of our 2008 strategy for research resulted in more than \$230,000 allocated to many different projects, one of which attracted National Health and Medical Research Council funding. Some of our projects were jointly funded by the Heart Foundation. We are also receiving welcome financial support for all of our programs from individuals, trusts and foundations, governments and business. We are now a truly national organisation with representation in all states.

As we reflect on the success of the past year, we remember with great sadness, the death of one of our two Founding Patrons, Sir John Holland, AC on May 31, 2009. Sir John was an inspiration to all of us.

I would also like to thank our supporters, Board and staff who have again made great efforts in another big year, and without whom we would not have achieved our gains.

CEO  
Dr Erin Lalor

## Prevention and awareness

### Issue

If more people are aware of what causes a stroke, the number can be reduced – 30% of adults aged over 25 have high blood pressure, a significant risk factor.<sup>1</sup>

### Response

#### Know your numbers

- 518 blood pressure checking stations were set up in local pharmacies and run by community health services, supported by Rotary and YMCA in Victoria and Queensland

- 22,000 people had their blood pressure tested
- 16,500 results showed that only 20% had normal blood pressure
- 46% tested in Queensland had high blood pressure
- 28% were referred to their GP for follow-up.

### Issue

Recognising the signs of stroke and taking prompt action to secure the right treatment can improve the chance of recovery – 86% of people surveyed in the 2009 National Stroke Foundation Awareness

Survey could correctly name one symptom of stroke and 49% were aware of FAST, the easy way to remember the signs of stroke and the action needed, but only 10% who had seen stroke advertising could name all four aspects of FAST: Face, Arms, Speech, Time (see back page).

### Response

#### National Stroke Week

Our major awareness program featured an updated FAST campaign to help people recognise the signs of stroke and act quickly.

- 2,313 Stroke Week packs were distributed, a 70% increase

- 4.5 million people read, saw or listened to news stories about stroke during Stroke Week.

#### strokesafe™ community education

- 61 strokesafe™ seminar kits were distributed to health services in rural and regional Victoria – 620 people attended 39 seminars
- 43 additional strokesafe™ seminars were held in Victoria, Tasmania and Western Australia
- 83 people attended 3 community forums in Tasmania and Western Australia to find out more about stroke.

## Stroke services

### Issue

Our 2009 National Stroke Audit of stroke services in 206 Australian hospitals found that there had been little or no improvement since an audit in 2007, and in some cases, the quality of stroke treatment was worse.

In the second part of the audit, 96 hospitals admitting high numbers of people with acute stroke reviewed 3,307 cases to see if their care followed the *Clinical Guidelines for Acute Stroke Management*.

Our audit identified that since 2007, 14 new stroke units had been established and stroke unit beds had increased by 143 to 534. However the audit also showed that:

- only 3 out of every 100 people who experienced a stroke received thrombolysis
- only 50% of stroke patients were treated on a stroke unit
- 22 more stroke units were required in hospitals providing care to almost 4000 stroke patients
- only 50% of hospitals had emergency department processes to ensure stroke patients were seen quickly

- only 50% of hospitals gave stroke patients a plan for care after they left hospital
- 66% of hospitals did not routinely assess patients' needs for further rehabilitation
- 25% of hospitals failed to routinely provide stroke patients with a name of someone they could call if they had any concerns.

### Response

- Every hospital taking part in the National Stroke Audit received an individual confidential report comparing how well they delivered stroke care with similar hospitals and national averages
- 13 StrokeLink workshops and 18 visits to hospital stroke teams in Queensland helped hospitals identify barriers and implement evidenced-based care
- 40 individuals from more than 25 organisations are represented in the Australian Stroke Coalition (ASC) working towards improving stroke care across Australia – 5 working groups met 18 times
- 375 GPs attended continuing professional development workshops

## Website and social media

### Issue

Social media provides opportunities to communicate our messages to new diverse audiences. It promotes informed discussion that provides us with feedback on what people know, don't know and want to know about stroke.

### Response

In 2009 there were:

- 121, 448 visitors to the NSF website
  - 465 fans on Facebook
  - 175 followers on Twitter
- Discussions by fans on Facebook have led to new support groups. Twitter audiences are from medical associations, hospitals, charities and other not-for-profit organisations.

- 7 health professional organisations with 27,300 members received guidelines and educational modules that were also distributed at a large GP convention in Melbourne
- 14,000-plus downloads of the *Clinical Guidelines for Acute Stroke Management* since it was published on our website in 2007
- 11,000-plus downloads of the *Clinical Guidelines for Stroke Rehabilitation and Recovery* since publication in 2005

- 40,966 journals scanned in a literature search to update and combine the acute and rehabilitation and long term recovery guidelines for stroke care, due for release in 2010
- 19 medical and allied health disciplines represented on the Expert Working Group that is responsible for the new clinical guidelines.

# 2,313

2,313 Stroke Week packs distributed

## Life after stroke

### Issue

Stroke can cause physical damage or impair intellectual ability creating a challenge for stroke survivors and their families and friends. It takes time, support and determination to get used to doing things differently and the results of the stroke can impact on intimacy, relationships, work and hobbies. Accessing services, support and information is critical in assisting survivors and carers to move forward after a stroke.

### Response

#### StrokeConnect

- 100 members joined Stroke Connect online, which in late 2009 began providing access to peer support any time of the day or night. The program will build in numbers in 2010. StrokeConnect by phone began at the same time.

#### Dream, Believe Achieve

- 96% of stroke survivors taking part in Dream, Believe, Achieve – a program to help stroke survivors get their lives back on track after stroke – said they would recommend the program to others
- 50% reported improvements in their ability to navigate the health system, which is essential to regain quality of life after stroke
- Almost 50% described themselves as stroke survivors not victims of stroke because the program had equipped them with skills to positively and actively re-engage in life
- 8 programs delivered in 5 Victorian regions.

#### Friends of the NSF

- 71 Stroke Support Groups were participating in the Friends of the NSF program by the end of 2009, receiving a quarterly newsletter, resources, and publications

- 37 groups received a \$200 community grant to run a National Stroke Week activity.
- **Stroke Support Groups**
- A Toolkit was developed in 2009 to help groups promote their work and gain new members. It will be available in 2010.

## StrokeLine

### Issue

Over the last two years, the StrokeLine service has needed to respond to a greater demand for information on stroke prevention from the community, and stroke

recovery from stroke survivors and carers, families and friends. This growing demand will continue.

### Response

- 2,583 calls to StrokeLine were taken.

Number of calls to StrokeLine



## Research

### Issue

Australia and the rest of the world need a better understanding of what causes stroke, how it can be prevented and treated and the best ways to provide after-stroke care. Our strategy established in 2008 aims to grow stroke research in Australia by supporting new investigators who will lead stroke research in years to come.

### Response

- More than \$230,000 allocated in 2009 to support research through small project grants, Honours grants, Fellowships and Scholarships, some of which were jointly funded by the Heart Foundation.

Grant recipients included:

- **Annie McCluskey**, Stroke Research Fellow: How to get stroke survivors back into the community. The grant enabled the project to attract another \$500,000 from the National Health and Medical Research Council.

- **Isobel Hubbard**, Stroke Research Scholar: A functional MRI study of upper limb therapy in community dwelling stroke survivors.
- **Shane Antao**, Stroke Research Scholar: Unravelling the mechanism of neuro-protection by neuroglobin.

#### Small Project Research Grants:

- **Damian McLeod**  
Establishing computed tomography perfusion imaging in an animal stroke model.
- **Christine Barry**  
Novel therapeutic approaches to subarachnoid haemorrhage targeting substance P.
- **Yasmeen El Masry**  
Understanding the experiences of caring for someone after stroke.
- **Lin Perry**  
Using best practice: A pilot feasibility study of integrated nutritional rehabilitation programs to improve dietary intake for stroke patients.

- **Mark Mackay**  
Developing strategies to decrease lag time to diagnosis in paediatric stroke.
- **Maarten A. Immink**  
A yoga and meditation program to improve physical function, mood and quality of life in individuals with chronic stroke-related hemiparesis.

#### Honours Grants:

- **Joyce Chan**  
Are physical outcome measures sensitive to change following botulinum toxin injections in adults with lower limb spasticity?
- **Weili Chan**  
Pilot study on a yoga and meditation-based rehabilitation program for balance and gait improvement for chronic post-stroke hemiparesis.
- **Alison King**  
An observational study of patient activity levels in one Sydney stroke unit.

- **Tom Lillcrap**  
Testing the efficacy of intravascular cooling for reducing the temperature of penumbra tissue after acute ischaemic stroke.
- **Katherine McGurk**  
Young stroke survivors' experiences of peer support.
- **Aisling Ryan**  
Measuring outcomes in people who have had a stroke: can the telephone be used?
- **Jacinta Spitzer**  
Relationship between performance and participation measures post-stroke.
- **Amelia Tomkins**  
Brain allopregnanolone levels in response to stroke.
- **Andrew Biviard**  
Defining the extent of irreversible brain ischaemia in acute middle cerebral artery occlusion using perfusion computed tomography.

## Fundraising

### Issue

As a not-for-profit organisation we rely on community and corporate support to find ways of preventing and treating stroke, Australia's second biggest killer and a leading cause of disability.

### Response

- \$6,783,715 raised in 2009
- 39,442 new donors in 2009
- 99 new members of the David Brownbill Bequest Society who have committed to leaving a bequest to the Stroke Foundation
- 6 bequests were realised in 2009 from the estates of:
  - Leslie Hazel Connell
  - Joan Summers
  - Hazel Alice Cox
  - Dorothy Hazel Power
  - Livio Nicolini
  - Henry Baldwin
- \$60,000-plus raised in the 2009 Counterstroke Golf Classic totalling more than \$1 million raised over 15 years
- 6 organisations recognised for again supporting the Counterstroke Golf Classic:
  - Trust Foundation
  - Drummond Golf
  - NAB
  - Anderson Kelly
  - Scotchmans Hill
  - Maxwell & Williams
- \$28,000 raised in the seventh annual Stroke of Art exhibition, held in the New South Wales Parliament House and launched at the ArtHouse Hotel in Sydney
- 400 postcards with messages of support received for Stroke of Art including one from the Prime Minister, Kevin Rudd
- Stroke of Art was once again organised by stroke survivor and artist Judi Halliday and supported by Veolia Environmental Services. Special thanks to artists Nick Safstrom and Robert Juniper and young stroke survivor Jen Li

- Nearly \$50,000 was raised by individuals, organisations and Memorable Challenges participants who staged events including sailing trips, sausage sizzles, and movie and trivia nights
- Eric Ormond Baker Charitable Trust
- The Pierce Armstrong Foundation

### Companies

- JA Davey (Omron)
- Ogilvy Healthworld
- Pfizer
- Servier
- Veolia Environmental Services
- Allergan
- Sanofi Aventis
- Glaxo Smith Kline

### Government departments

- Australian Government Department of Health and Ageing
- Department of Health (Victoria)
- Department of Health and Human Services (Tasmania)
- Queensland Government/ Queensland Health

### Pro bono supporters

- Corrs Chambers Westgarth
- DraftFCB
- IMCD Australia
- Aviva
- Starcom MediaVest

### Trusts and Foundations

- ACTA Page-Hanify Family Benefaction
- FRRR – The Estate of the Late Edward Wilson
- Adelaide Bank Charitable Foundation
- Helen Macpherson Smith Trust
- Perpetual Trustees
- ANZ Trustees Foundation
- Ruth Fagg Foundation
- Bell Charitable Fund
- Sunshine Foundation
- Bruce Wall Trust
- The J.O. and J.R. Wicking Trust

## Media

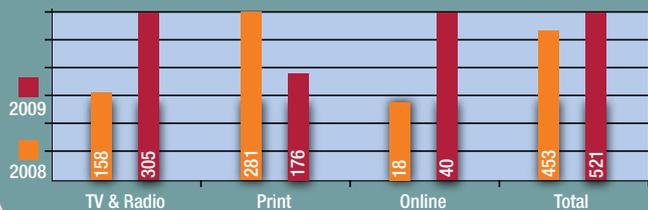
### Issue

Communicating about stroke in the mainstream media can be difficult with tough competition for space.

### Response

- 521 stories mentioned the National Stroke Foundation in 2009
- A 259% increase in coverage of stroke from 2006 to 2009
- 60% of media was about National Stroke Week and the FAST campaign
- More stories about National Stroke Foundation's other work, including audit of stroke services, guidelines for stroke care, life after stroke and support for stroke survivors
- Growing number of media requests for expert comment on stroke related research.

Summary



## Publications

### Issue

People in the community who have had a stroke, or who are concerned about their stroke risk, need to know more about how to reduce their risk, or to improve their recovery after stroke.

### Response

- 1,096,562 – pieces of information were distributed to fill nearly 800 orders
- 1,500 website hits to a stroke fact sheet in either Chinese, Greek, Italian, Arabic, Vietnamese or Italian
- New resources developed in 2009 include a booklet on childhood stroke for parents and families produced with Strokidz and Royal Children's Hospital, Melbourne.

## Governance and accountability

### Issue

Growing awareness of stroke, generated in large part by the National Stroke Foundation, created new opportunities and greater demands on policy development, programs and information services. To meet these demands we

extended our national reach, taking on additional employees with enhanced skills and continued to upgrade management systems covering financial investment, human resources, information technology, telecommunications and risk management.

### Response

- \$11.4 million in total revenue (including bequests and income from investments) in 2009 – 41% increase from 2008.
- 48 full-time and part-time staff compared with 40 at the end of 2008

- Staff representation in all states with offices in Hobart and Perth and program specific staff in a new serviced office in Brisbane.

## Financial performance

Revenue	2009 (\$,000's)	2008 (\$,000's)	2007 (\$,000's)	2006 (\$,000's)
Community Support - Non-Bequests	7,063	6,621	3,938	3,221
Community Support - Bequests	1,972	91	5	14
Corporate Support	338	352	629	404
Government Support	1,475	915	797	503
Product Merchandise	73	131	96	125
Interest Income	56	90	116	68
<b>Total Revenue</b>	<b>10,977</b>	<b>8,200</b>	<b>5,581</b>	<b>4,335</b>
<b>Expenses</b>				
Priority Area 1 - Prevention & awareness	1,619	1,333	1,129	535
Priority Area 2 - Stroke services	1,042	847	582	241
Priority Area 3 - Life after stroke	879	751	317	202
Priority Area 4 - Research	254	40	65	-
Priority Area 5 - Fundraising*	3,988	4,348	2,700	2,435
Priority Area 6 - Governance & accountability	924	838	612	320
<b>Total Expenses</b>	<b>8,706</b>	<b>8,157</b>	<b>5,405</b>	<b>3,733</b>
<b>Surplus From Ordinary Operations:</b>	<b>2,271</b>	<b>43</b>	<b>176</b>	<b>602</b>
Other Investment Income	103	39		
Restatement of of Investments to Fair Value	353	(178)		
<b>Total Other</b>	<b>456</b>	<b>(139)</b>	<b>5,405</b>	<b>3,733</b>
<b>OVERALL RESULT</b>	<b>2,727</b>	<b>(96)</b>	<b>176</b>	<b>602</b>
<b>Financial Position</b>				
<b>Assets</b>				
Cash (inc. Deposits)	2,495	1,498	2,415	2,130
Receivables	347	207	262	329
Inventory	7	9	2	4
Other Financial Assets at Fair Value**	2,602	719	535	-
Fixed Assets	252	255	90	62
<b>Total Assets</b>	<b>5,703</b>	<b>2,688</b>	<b>3,304</b>	<b>2,525</b>
<b>Liabilities</b>				
Payables	396	594	1,182	613
Provisions	1,211	684	763	729
Lease Liability	105	147	-	-
<b>Total Liabilities</b>	<b>1,713</b>	<b>1,425</b>	<b>1,945</b>	<b>1,342</b>
<b>ACCUMULATED FUNDS</b>	<b>3,991</b>	<b>1,264</b>	<b>1,359</b>	<b>1,183</b>

### Ratios and Expenditure Notes:

Direct fundraising expenses to income\*\*\* 22%

Administration expenditure to income 8.4%

\* Includes major development investment into a donor acquisition program

\*\* Increase in 2009 represented in part by "Australian Listed Shares" from a Bequest received

\*\*\* Does not include income and expenses associated with major developmental investment

375 GPs attended workshops

# 375



**The honorary Board includes medical, business, research and consumer representatives.**

## Patrons and Board

### Patron-in-Chief

Her Excellency, Ms Quentin Bryce AC, Governor-General of the Commonwealth of Australia

### Patrons

David Brownbill, AM  
Sir John Holland, AC (deceased 31 May 2009)  
Sir Gustav Nossal, AC  
Lady Southey, AC

### Chief Executive Officer

Dr Erin Lalor

### Medical Directors

Professor Christopher Bladin, MD, FRACP  
Associate Professor Christopher Levi, MD, FRACP

### Board

The honorary Board includes business, research, consumer representatives and two Medical Directors

### President

Professor Richard Larkins, AO (appointed September 2009)  
Dr John Lill, OAM (resigned April 2009)

### Vice Presidents

Andrew F Buckle, OAM  
William J Forrest, AM  
Robert Trenberth (resigned April 2009)

### Treasurer

Graeme Bowker

### Company Secretary

John Buchanan

### Directors

Professor Richard Smallwood, AO (resigned October 2009)  
Associate Professor Julie Bernhardt  
Professor Richard Lindley  
Paul Leeds  
David Evans  
Michael Hill  
Paul Shanley (appointed February 2009)  
Ian Collins, AM (resigned December 2009)  
Susan Aveyard

### Ambassadors

Judith Halliday  
Angelo Lekkas  
Brooke Parsons  
Ross Pearson

### Solicitors

Corrs Westgarth Chambers

### Auditors

RSM Bird Cameron

### Consultant Accountants

Evans Buchanan

### Finance Investment and Risk Committee

Graeme Bowker, Chairman  
Dr John Lill, OAM (resigned April 2009)  
David Evans  
Andrew Miles  
Dr Erin Lalor  
Glenn Sheffield (ex officio)  
Matthew Oakey, Evans Buchanan (ex officio)

### Governance and Nominations Committee

William J Forrest, AM  
Andrew F Buckle, OAM



strokefoundation

## Australia's second biggest killer

Stroke is Australia's second single greatest killer after coronary heart disease and a leading cause of disability.<sup>2</sup>

In 2010, Australians will suffer over 60,000 new and recurrent strokes – that's one stroke every 10 minutes.<sup>3</sup>

One in five people having a first-ever stroke die within one month and one in three die within a year.<sup>4</sup>

The number of strokes will increase each year due to the ageing population unless the incidence is reduced.<sup>5</sup>

In the next 10 years more than half a million people will suffer a stroke.<sup>6</sup>

## Join us on our mission

To stop stroke, save lives and end suffering, we rely mainly on the community, with support from governments, philanthropic and corporate organisations that fund vital programs.

You can help by:

- making a tax deductible donation online or by post
- leaving a bequest in your Will
- becoming a corporate partner or sponsor
- volunteering
- holding your own fundraising event
- taking part in fundraising events
- spreading the word about stroke.

## Contact us

### National Stroke Foundation

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### National Stroke Foundation (Western Australia)

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F +61 8 9346 7534  
wa@strokefoundation.com.au



[www.strokefoundation.com.au](http://www.strokefoundation.com.au)

For information or advice about stroke call our

**StrokeLine 1800 787 653 (free call)**

1. AusDiab 1999-2000 as cited in AIHW December 2009, Prevention of cardiovascular disease, diabetes and chronic kidney disease: targeting risk factors. Cat. no. PHE 118. Canberra: AIHW  
2. Australian Institute of Health and Welfare 2006. Australia's Health 2006.  
3. AG Thrift (personal communication). Estimates obtained using NEMESIS data (assuming no change in incidence), and Australian Bureau of Statistics estimates of a changing population  
4. Thrift AG, Dewey HM, Macdonell RAL, McNeil JJ, Donnan GA 2000. Stroke incidence on the East Coast of Australia: the North East Melbourne Stroke Incidence Study (NEMESIS). Stroke 31 (9):2087-2092.  
5. AIHW; Senes, S 2006. How we manage stroke in Australia  
6. AG Thrift (personal communication) see above. These estimates are for 2008 to 2017 inclusive (i.e. 10 years)

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