

Polio Oz News

March 2024 – Autumn Edition

Worldwide Post-Polio Education Survey

By Michael Jackson

Polio Australia Clinical Educator

Late in 2023, we reached out to known post-polio organisations internationally. This was to determine the features and needs of any post-polio education activities they engaged in, and also their position on education models, funding, health support, knowledge loci, and advocacy effect. Organisations and groups were asked to submit responses to an electronic survey. 20 responses had been received by March 2024.

A summary of results was created by Polio Australia that did not identify those who responded, and did not include any interpretation by Polio Australia. This summary was then shared with those organisations and groups who provided responses. Their individual interpretations have been encouraged, and we hope to receive or read about them. The summary of results can be found via this link: <https://bit.ly/ppedu-survey-results-0324>

What follows is Polio Australia's interpretation of the results. Keep in mind that neither Polio Australia nor its state member organisations completed the survey; Polio Australia was the facilitator of this process.

Response Rate

The response rate was low for the number of organisations and groups we contacted. 80% of responses were from small regionally acting groups. Ideally, we would like to see another 15-20 responses from unrepresented regions to be more confident in the strength of what appear to be shared concerns, but also to better see any differences between post-polio organisations and

post-polio support groups/networks.

Trend Areas

The following areas had high group responses, or agreement in a particular direction:

- Education is primarily provided to fit groups' purposes, resolve education demands, and fill a recognised education gap
- Education is predominantly provided to all members, and to non-members and community groups
- Polio experts are a major source of education content
 - The top modes of education were support group discussion, newsletters and electronic resources
 - Most felt they managed education well, but would like to improve it
 - For half, funding comes from donations or from local government
 - Measuring, monitoring and evaluating education is mostly informal
 - There is an agreed need for education of the polio-affected and their clinicians
- Confidence is low in the post-polio support provided by large health systems
- Those affected by polio are seen to hold loci of knowledge on post-polio conditions
- Member satisfaction is oriented to a mix of factors related to advocacy work
- Member dissatisfaction is strongly oriented to lack of knowledge amongst local medical and health professionals
- Almost half favoured a national program model - they may be seeking leadership or cohesion with post-polio education



Polio Australia

Representing polio survivors

PO Box 2799
North Parramatta NSW 1750
Phone: +61 3 9016 7678
contact@polioaustralia.org.au

President—Gillian Thomas OAM
gillian@polioaustralia.org.au

Vice President—Gary Newton
gary@polioaustralia.org.au

Secretary—Maryann Liethof
maryann@polioaustralia.org.au

Treasurer—Alan Cameron
alan@polioaustralia.org.au

Editor—Maryann Liethof
editor@polioaustralia.org.au

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Polio Australia's Websites

Welcome to the Polio Australia website. Polio Australia is a not-for-profit organisation supporting polio survivors living in Australia. This website contains information about polio, the Late Effects of Polio, the work of Polio Australia and much more.

www.polioaustralia.org.au

The Polio Health website is a comprehensive resource for both health professionals and polio survivors. It contains clinically researched information on the Late Effects of Polio; the Health Professional Register; and where Polio Australia's Clinical Practice Workshops for Health Professionals are being held.

www.poliohealth.org.au

The Australian Polio Register was established by Polio Australia in October 2010 to gather information on the numbers of polio survivors living in Australia today, whether or not they contracted polio in this country. To make the Australian Polio Register truly reflective of the unmet need for polio services throughout Australia, we urge every Australian polio survivor to join the Polio Register. Our strength lies in our numbers—please help us to get you the services you need by adding your polio details to the Register. You can register online or by downloading and completing a [paper copy](#).

www.australianpolioregister.org.au

“In her finest gold-tipped pen,
Nature writes the poem of
autumn upon the earth.”

~ Laura Jaworski ~

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President's Report



By Gillian Thomas OAM
President

It's a new year bringing a new challenge to secure funding for the Health Worker Education Program, following the decision from the Federal Department of Health not to provide any further funding. The Polio Australia Team has distilled the key issues arising from the current lack of adequate funding, noting that this situation challenges the balance of Polio Australia's priorities: delivering on our mission while remaining financially viable. The resultant concerns include:

- *Weakened advocacy efforts – submissions, lobbying, and participation in national meetings will be compromised;*
- *Shutdown of Health Worker Education Program – legitimate comments voiced by those affected by polio persist regarding a lack of health team professionals' knowledge of post-polio conditions; support for our post-polio community will need recalibration;*
- *The future of the Clinical Advisory Group – without engaging with and requesting experts'*

- *participation, connections between clinical expertise and end users will diminish;*
- *Future funding – a decreased workforce may hinder our ability to identify and secure alternative funding sources for the organisation's future sustainability;*
- *Decrease in staff capacity would require further discussion regarding staff roles and responsibilities.*

It is clear that Polio Australia has now reached a crossroads. In February, the Board decided that a face-to-face meeting is required in order to spend the dedicated time needed to make some important decisions for our future. The meeting will take place in Sydney in May, and members are self-funding the forum.

Board members from five states will be present. Regrettably, both Western Australian members resigned at the end of 2023, and replacements are yet to be nominated. We look forward to this being resolved soon as it is important that all Australian polio survivors have representation at the meeting.

I continue to live with the hope that a multi-million dollar lotto winner is looking to donate to a very effective charity supporting polio survivors! 🍀

Gillian

From The Editor



By Maryann Liethof
Editor

Welcome to the first edition of *Polio Oz News* for 2024! December through to March is usually a quiet time for collecting and collating information regarding things-polio. However, two new polio outbreaks in Indonesia and Zimbabwe have generated a bit of angst at the World Health Organisation (p12-13). With Indonesia being Australia's close neighbour, you would think there might be an increase in vaccine reminders from health-related sources. I can only guess there is a lot of trust in the efficacy of our herd immunity.

Another article that came to my notice related to the cost of the 2022 polio outbreak in New York (p10), the first polio outbreak in the United States in decades. Once again, this got me thinking about whether we, i.e. the so called 'developed' countries, are simply becoming complacent about polio vaccines.

Then I read an interesting article by Prof Max Roser, the founder of online resource, *OurWorldInData.org* (p11). His piece served as a reminder of just how far we have come in our global fight against polio. Not only was this an

easy-to-understand analysis, the website itself is a great find, and I encourage everyone to take a look.

Nutritionist, Melinda Overall, has once again contributed great 'food for thought' on the issue of being underweight – not something a lot of us might ever think about. However, it does come with its own health concerns, which Melinda has outlined in her article (p8).

I have included a couple of reading suggestions, with one of the authors, Susan Schoenbeck, recently guest presenting for one of Devalina's Zoom sessions (p4). The other author, Kay Cora Jewett, has brought together a selection of stories and essays in her new book "*Over the Fence, Into the Heart*" (p8). Both authors are polio survivors who have clearly lived lives worth sharing.

It's great to see Polio Australia's video series gaining traction (p6), and that they are now available in several community languages. This enables us to extend (free) support to polio survivors who may live in other countries where access to clear, factual information about the late effects of polio may not be easy to find.

Michael Jackson has clearly outlined the challenges to continuing this support in his update (p4 and p16). 🍀

Maryann

Clinical Education Update



By Michael Jackson
Polio Australia Clinical Educator

2024 workshops are off to a solid start thanks to a productive visit to Adelaide in early February. This was thanks to a workshop being scheduled in late 2023 by Enable Fitness Centre (thanks to our research partner Dr Tim Lathlean). Through January we were able to secure other clinics for workshops, and to schedule a Q&A session with Polio SA members. It made for a full and busy week of education.

Audiences to date in 2024 are as follows (attendees):

- Core Physiotherapy – Morphett Vale, SA – 5-Feb (9)
- *PolioSA Lunch Q&A Session* – 6-Feb (36)
- Modbury Hospital - Modbury, SA – 6-Feb (25)
- The Queen Elizabeth Hospital – Woodville, SA – 7-Feb (15)
- Enable Fitness Centre – Holden Hill, SA – 8-Feb (14)
- Monthly Zoom Workshop February – 14-Feb (2)
- Sunshine Coast Neurorehab Zoom – 26-Feb (2)
- Monthly Zoom Workshop March – 13-Mar (2 scheduled)

We have reached 67 clinicians over the year's first two months – this is well above the average reached (11) over the last three years. The second half of the year is usually the strongest performing for number of attendees, by a factor of almost two.

Our program continues to accept requests for professional clinical workshops, however seeking them is not our highest priority – we are oriented towards securing program funding. Currently this program operates on a six days per fortnight schedule to draw out existing resources until at least the end of the 2023-24 financial year.

Without the Health Worker Education Program (HWEP), Polio Australia, its member organisations, and those affected by polio nation-wide, will be without most of the activities shown on the HWEP program schema—see P16 or link [here](#). Please look over the schema to understand what is at stake with the loss of this program.

Post-Polio Research Update

Two research projects are in motion at the current time: the study of AIHW hospitalisation data to examine post-polio hospitalisations in Australia over a 10-year period, and a Delphi consensus statement project on the topic of recommendations for exercise in those with post-polio conditions.

The post-polio hospitalisation manuscript has been finalised and is ready for journal review. There are still at least a few months of due process prior to it being published – final details are likely to be announced in the next issue of PON.

The Delphi consensus statement project is now moving into the spotlight for the research group. Being a cooperative process utilising international post-polio experts means that our team needs to be very thorough. Delivering and managing the Delphi process astutely for those experts is critical to participation and success. We anticipate the initial round of gathering expert responses to post-polio exercise statements will start in the next month or two. 🎯

Donations and Bequests to Polio Australia help ensure that all polio survivors in Australia have access to appropriate health care and the support required to maintain independence and make informed life choices. Polio Australia is endorsed by the Australian Taxation Office as a Health Promotion Charity and a Deductible Gift Recipient making all Australian donations over \$2 tax deductible. Polio Australia will issue an official receipt for all donations received.



Community Programs Update



By Devalina Battcharjee
Community Development Worker

We had the privilege of welcoming Susan L. Schoenbeck, MSN, RN as a guest speaker on our Zoom Monthly Chat, which are held on the first Monday of every month. For the month of December, we had her share her presentation on Polio Pain and Fatigue.

Susan summarised that resting between activities is essential to pain prevention and management.

Some other examples of pain prevention and treatment measures to be considered include, respiratory breathing exercises, physical therapy exercises, getting out in the morning sunlight or circling a labyrinth, swimming, stationary bike riding, strength training, weightlifting, and nutrition to fight inflammation and obesity. Additionally, preventative/home treatment measures for constipation, simple measures to combat cold intolerance such as layering up when you get up in the morning and shedding the layers as the hours go by and your body naturally heats up, can help a great deal. Susan



cautioned against overuse of over-the-counter pain relief medicines and the use of electronic devices to reduce pain.

Susan also touched upon grief as a driver of pain, as grief can make pain worse. Some common manifestations of grief include tears and sadness, but we must also remember that grief can also be expressed as difficulty in focusing, loneliness, anger, feelings of uncertainty, and reduced ability to perform daily chores and enjoy hobbies. Factors that contribute to our grief are changes in our independence to go out and do what we want, when we want and a feeling of marginalization by others.

Unraveling polio pain and fatigue requires thoughtful tracking over time and the voices of polio survivors to educate healthcare professionals.

In other news, at long last, we have been successful in arranging Community Information Sessions in Tasmania on the 21st and 22nd of March.

More details on the Tasmania and all other community information sessions can be found here, www.polioaustralia.org.au/community-information-sessions/

Until then, stay happy and healthy! 🌟

Susan Schoenbeck's work has been published in peer-reviewed international journals, and in lay publications for everyday people.

In her books, *The Final Entrance: Journeys beyond Life*, *Good Grief: Daily Meditations*, *Near-Death Experiences: Visits to the Other Side*, *Zen & the Art of Nursing*, and *Heaven & Angels*, Schoenbeck recounts the experiences patients and health professionals have shared about death and dying. Case studies from her critical care nursing and research about near-death experiences during cardiopulmonary resuscitation are presented.

She has received the Universal Voice Award, and numerous awards for excellence in nursing, teaching, and writing. Schoenbeck is an oblate of an ecumenical community founded by Holy Wisdom Monastery. 🌟

In Australia, Susan Schoenbeck's books can be purchased through:

[Amazon](#), [Dymocks](#), [Booktopia](#), and more.

Video Education Series: Statistics and Translations



By Paulette Jackson
Administration Officer

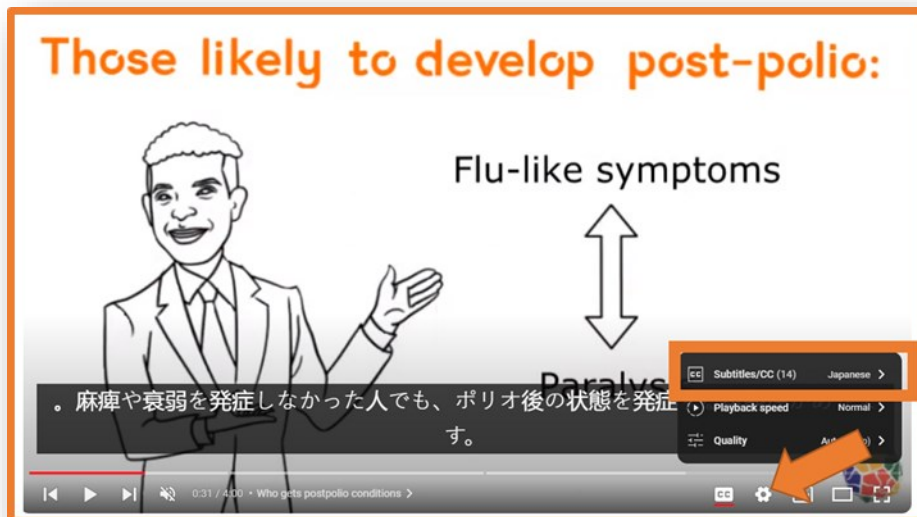
As you may have read in the Summer 2023 edition of *Polio Oz News*, we developed a video series, "[Answers to Ten Post-Polio Questions](#)" to educate the community and health professionals about post-polio conditions.

Our February statistics indicate these videos have been very well received. The release of this series has also increased engagement with our older videos, extending their impact and our advocacy.

So far, the most watched videos from the "Answers to Ten Post-Polio Question" series include:

- Who gets post-polio conditions and what are they? (700 views, 14 likes)
- What are the main symptoms of post-polio? (538 views, 14 likes)
- What does a person experiencing post-polio look like? (262 views, 7 likes)

Did you know you can also watch these videos with subtitles that have been auto-translated into 13 different languages? You can select subtitles and languages via the cogwheel/settings icon at the bottom of the videos (see image below). If there is a language you would like us to add, please let us know at office@polioaustralia.org.au.



These videos have been compiled into their own playlist on our YouTube channel. You can access the playlist [via this link](#). We will be publishing the remaining videos in this series very soon.

Subscribe to our channel to receive notifications when new videos are published. Don't forget to like and share! 🌟



Worldwide Post-Polio Education Survey *(cont'd from P1)*

- The majority of organisations and groups are willing to share their education experiences with others

Problem areas

- Cohesion of post-polio organisations and groups needs to be established around the most common or most-restricting concerns about education
- Three quarters of the responses obtained were from North America and this may have skewed some of the results
- 45% to 70% do not educate health professionals, yet 'lack of education of clinicians' is the strongest dissatisfaction theme for members
- Post-polio experts are a main source of content, but they may be inaccessible to members and clinicians given the level of dissatisfaction with clinicians
- About half see the value in a professional registry, yet there appears to be limited formal education of clinicians enabling them to qualify for a registry
- The factors limiting post-polio education provided are diverse for these organisations and groups – only two options reached a level of 35%

Synopsis

Polio Australia's mission is *to standardise quality polio information and service provision across Australia for polio survivors*. We have a two-pronged education approach – one arm for each of the two key audiences highlighted in this survey: polio survivors and their families and carers, and multidisciplinary clinicians.

The responses from other organisations and groups to this survey highlight the same barriers, problems and frustrations that we have recognised. Yet what we have in Australia is a structured, formal and professionally-led approach, already enacted, to reduce that which has been recognised.

This survey has enabled us to obtain new ideas and observe context that will advance our own education programming, but most importantly it confirms that we are not alone in wanting or trying to resolve what we face. We know education is much more than having information on a topic – it is also about the delivery and

contextualisation of information so that information is put to best use.

We recognise that some aspects of post-polio education and the approaches to it are quite varied. There is likely no 'one-size-fits-all' solution internationally. But, this survey provided evidence that there is good potential and motivation across organisations and groups to make improvements in what they do with their education, and to work together to benefit those affected by polio more broadly.

What's next?

We will try to establish a path forward with international post-polio organisations and groups, based on what the survey showed and how it was interpreted by those who have done so. Ultimately, we endeavour to progress the following:

- Raise the profile of collective need for post-polio education here and abroad
- Advance the scope and delivery of education for those seeking it worldwide
- Secure support for post-polio education activity across nations as a means to constrain health-costs and improve care efficiency; and - fundamentally -
- Increase the quality of life and participation ability of those affected by polio

The survey is still open and accepting international responses – we continue to establish contact with previously unreached groups and organisations. Click [here](#) for a link to the survey.

Keep an eye out for an infographic about this survey on social media – it will be circulating in the next week or two. 🌐



Underweight Associated Health Issues

By Melinda Overall JP

Nutritionist / Counsellor

www.overallnutrition.com.au

Nutritionists, dietitians, GPs and other health professionals often provide commentary of the health impacts of overweight and obesity. You will, no doubt, have read numerous articles in magazines and newspapers, and have seen attention-grabbing snippets on television about the next best weight loss drug, surgery or other intervention. What people don't tend to hear about are the health impacts of being underweight, and in fact, underweight has been subject to far less research than overweight and obesity [1].

Underweight is underwhelmingly defined as 'being under the healthy weight range' [2]. Currently this refers to having a body mass index (BMI) of 18.49 or below, but for some people a 'healthy' BMI could mask issues of underweight such as very low body fat mass, abnormal nutrition and muscular atrophy [1]. Optimal weight is very much an individualised determination and there is no one-size-fits-all number for optimal weight.

What is known though, is that being underweight can incur a number of significantly detrimental health outcome. This is very likely due to the lack of metabolic reserves in underweight people, and this is especially so in older individuals [3].

Health impacts of underweight include:

- Increased likelihood of hospitalisation [3]
- Poor nutritional status [3]
- Increased systemic inflammation [3]
- Poorer quality of life [4]
- Shorter life-span and higher overall mortality [1, 4]
- Increased risk of stroke [1, 5]
- Increased risk of myocardial infarction and atrial fibrillation and other cardiovascular diseases [3, 5]
- Hypothalamic-pituitary-gonadal axis dysfunction leading to infertility in both men and women [1, 6]

References:

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- Disrupted gut microbiome and poorer immunity [1]
- Increased risk of respiratory illnesses [1]
- Impaired wound healing and slower recovery from illness [1]
- Increased risk of cancers [1]
- Increased risk of neurodegenerative diseases such as dementia [1]
- Sleep disturbances and mood changes [1]
- Poor energy production [1]
- Multi-organ damage [1]
- Increased risk of osteopaenia, osteoporosis and pathogenic fractures [1]

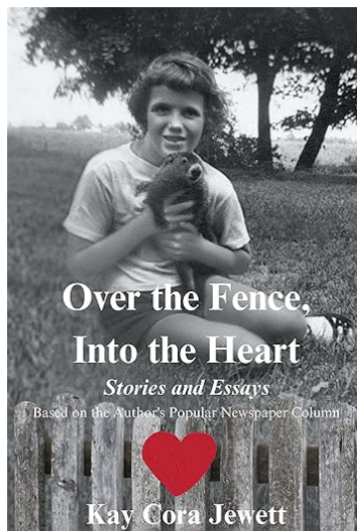
..and the list goes on.

It is very common to have clients wanting to lose weight but it is important not to lose weight for the sake of a shift on the numbers on the scale. Dropping weight too rapidly and without ensuring good body composition (that is, good muscle mass, lower abdominal fat) can be detrimental to your health. If you think you need to lose weight, it would be a good idea to reach out to a clinical nutritionist or dietitian to help you develop a nutritionally replete diet to avoid malnutrition, and the slide into underweight.

If you find yourself losing weight without intentionally trying to do so or without a known cause, please check in with your doctor for a thorough health review. 🌟



Something To Read ...



Roll over image to zoom in

Read sample

Follow the author



Kay Cora Jewett

Follow

Over the Fence, Into the Heart: Stories and Essays Based on the Author's Popular Newspaper Column Kindle Edition

by Kay Cora Jewett (Author) | Format: Kindle Edition

5.0 ★★★★★ 6 ratings

[See all formats and editions](#)

"Kay Cora Jewett has an amazing ability to paint pictures of people and places with her words. I could really relate, as I'm sure most readers will, to all the family dynamics – as well as to the sights and smells and sounds of the past she so aptly describes. Once I started reading, I couldn't stop. It's as if she pulled back the curtain and let us look into her soul." – Marvin Wilson

Told with a touching sensitivity, these wide-ranging stories and essays cast a spell that often envelops the reader in another time and place. Along the way, striking events and memories illustrate the value of courage and perseverance, as well as the unrelenting elusiveness of time.

Kay Cora Jewett takes you on a journey that chronicles her early bout with polio, her tumultuous and sometimes dangerously naive school years, and her unusually diverse careers. Accompany her on a walk through the mean streets of 1960s Chicago as she visits her welfare clients, or witness an encounter with a Vogue photographer as she flirts with the possibility of fame. Laugh at her problem-plagued but inspiring time as a magazine publisher. Follow her through the challenges of a remarkable life, including the deaths of a child, a sister, and some cherished and memorable friends. Get lost in the enchanting tales of her many beloved and exceptional animals.

"Over the Fence, Into the Heart" is a mix of humor, hope, derring-do, and sometimes tragedy. The author's observations are based on a unique and perceptive view of life. Readers will find themselves alternately laughing, crying, and shaking their heads, but always reading on with anticipation.

[^ Read less](#)

Print length



Language



Sticky notes



Publication date



File size



In Australia, "*Over the Fence, Into the Heart*" can be purchased through:

[Amazon](#), [Dymocks](#), [Booktopia](#), and more. 🌐

An Afghan Experience

"I don't want children to be affected by poliovirus like I was."

A polio survivor in Nangarhar shares his challenges and advises parents to vaccinate their children.

Source: polioeradication.org/ — 4 March 2024

My name is Farid, and I am 35 years old. I live in the Bati Kot district of Nangarhar province. I contracted polio when I was three years old. The symptoms started with a fever, then a weakness in my left leg and weakness in my left hand. While strength eventually returned to my hand, my leg remained weak. My parents took me to the doctor. After medical examinations, the doctors said that I had polio and there is no cure. When my parents heard that I could not be treated, they took me home.

Growing up with a paralyzed leg created many challenges for me. I couldn't play with other children but I never lost hope. I fought to live my life like other children in my community. I started attending school, then completed my studies in computer science. My parents were

always supportive, especially in my studies and building my career.

In my personal life, I also encountered challenges. When I wanted to get married, I faced rejection four times from different families. They did not want to marry their daughters to me because they said I have a disability and cannot work. I'm happy my wife's family accepted me and I now have four beautiful children. I make sure to vaccinate my children at every opportunity. I don't want them to be affected by poliovirus like I was. I also encourage my neighbors to vaccinate their children whenever they have the opportunity.

My daily life is challenging and I face many obstacles. There are certain tasks and jobs that my relatives, friends, and neighbors can do, but I cannot. I have some land in my village where I grow things like wheat and corn to help feed my family. Because my paralysed leg prevents me from cultivating my land, I pay someone to do this for me. This often brings me disappointment.

Because I know firsthand the danger of poliovirus and how it can affect the lives of

Cont'd P10

An Afghan Experience *(cont'd from P9)*

children and their families, I joined the polio eradication programme in 2017. I work as a supervisor, and my job is to train vaccination teams under my supervision. I prepare them for vaccination campaigns, make sure they receive enough vaccines and equipment, monitor their work and report their achievements at the end of each day during the campaign. On campaign days, I go out and make sure all is working well for the teams, that they have everything they need and that all children in my area receive the polio vaccine.

For those who do not want to vaccinate their children, I go to their houses and tell them that the only way to protect their children from poliovirus is by vaccinating them with two drops of polio vaccine. I also tell them that if you don't vaccinate your children, they could be paralysed like me. I share my personal story with them and challenges that I face in daily life. In our village, we used to have many vaccine refusals, but now they are few because I take the time to talk with parents and carers and explain my situation.

Even when we are not having vaccination campaigns, I talk with people and raise awareness about poliovirus and the importance of polio vaccine. We must vaccinate our children against polio at every opportunity. Polio is a terrible, crippling disease and we cannot let any child be paralysed. 🌟



2022 Polio Outbreak Cost Evaluation

2022 Polio outbreak, Rockland County, NY: Cost evaluation of strategies to prevent future outbreaks of vaccine-preventable diseases

Authors: Jamison Pike, James Lueken, Julie Zajac, Ashley Tippins, Shani Doss, Adina De Coteau, Chitra Punjabi, Maria Souto, Achal Bhatt

Source: sciencedirect.com — February 2024

Highlights

- In 2022, a case of paralytic polio in an unvaccinated adult resident of Rockland County was confirmed.
- In the US, detection of a single case of polio represents a public health emergency.
- We assessed the cost of provider outreach and immunization record assessments of licensed childcare and Head Start facilities aimed at preventing future outbreaks of VPDs.
- Total public health labor cost incurred of activities was approximately \$139,000.

Abstract

In 1994, the World Health Organization Region of the Americas was declared polio-free. In July 2022, a confirmed case of paralytic polio in an unvaccinated adult resident of Rockland County, New York was reported by the New York State Department of Health (NYSDOH) and Rockland County Department of Health (RCDOH). While only one case was identified, a single case of paralytic polio represents a public health emergency in the United States. The patient's county of residence was identified to have low vaccination coverage indicating that the community was at risk for additional cases. Disease outbreaks are resource-intensive and incur high costs to the patient, local health departments, and to society. These costs are potentially avoidable for vaccine-preventable diseases and thus, highlight the urgency to not only interrupt transmission but to prevent future vaccine-preventable disease outbreaks by improving vaccination coverage.

Following case confirmation, an investigation and response was initiated by NYSDOH, along with local health departments and the Centers for Disease Control and Prevention (CDC).

2022 Polio Outbreak Cost Evaluation *(cont'd from P10)*

After the initial investigation and response, collaborative efforts to mitigate risk and strengthen routine immunization continued, which included provider outreach and immunization record assessments of Head Start and licensed childcare facilities (primarily those with missing or incomplete required vaccination coverage reports from the previous year) in Rockland County. We estimated the costs of (1) provider outreach and (2) childcare and pre-kindergarten immunization record assessments of select licensed childcare and Head Start facilities in Rockland County. The total labor cost incurred for these activities was \$138,514 with a total of 2,555 h incurred. Often there are unique opportunities in the midst of an outbreak for public health to implement activities to proactively address low vaccination and strengthen vaccination coverage and possibly prevent future outbreaks. Understanding the cost of these activities might help inform future outbreak planning.

Discussion

The 2022 Polio Outbreak in Rockland County, NY represented the first polio outbreak in the United States in decades. The outbreak highlighted the urgency to not only interrupt transmission but to prevent future vaccine-preventable disease outbreaks by improving vaccination coverage. It is imperative to identify the appropriate response measures that can achieve this goal, along with associated costs. Previous literature estimating the cost of outbreaks highlighted the expense of these outbreaks

Conclusion

Often there are unique opportunities in the midst of an outbreak for public health to implement activities to proactively address low vaccination and strengthen vaccination coverage and possibly prevent future outbreaks. Understanding the cost of these activities might help inform future outbreak planning.

<https://doi.org/10.1016/j.vaccine.2024.02.025>

The Global Fight Against Polio

... how far have we come?

By Max Roser

A generation ago, polio paralyzed hundreds of thousands of children every year. Many countries have now eliminated polio, and our generation has the chance to eradicate it entirely.

Source: ourworldindata.org
— 19 February 2024

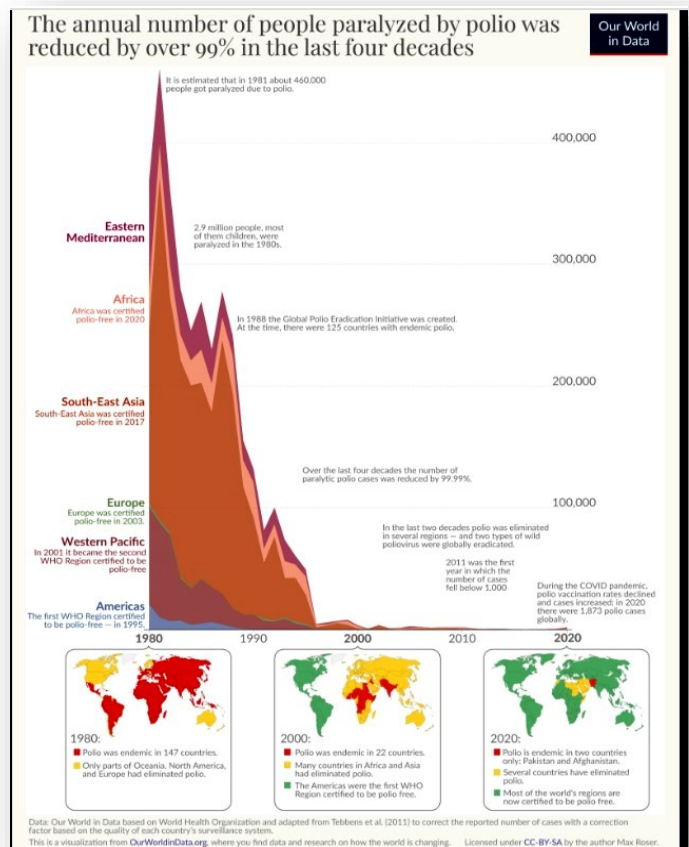
Polio is an infectious disease that affects children in particularly terrible ways. Once the poliovirus invades the nervous system, it can cause irreversible paralysis in a matter of hours. As a consequence, many affected children suffered from permanent disability of the muscles in their legs. In the worst cases, it affects the muscles a child uses to breathe, which means that the child suffocates and dies.

To prevent them from dying of suffocation, polio victims were once placed into large mechanical breathing apparatuses called iron lungs. The iron lung was both a lifeline and a life sentence for those permanently paralyzed by the virus, as they would have to remain inside the metal box for years.

Children are still suffering from polio today, but the disease is much rarer than it once was. In this short article, I want to show how far the world has come in our battle against polio, and I want to show that we today have the

opportunity to end polio once and for all. This — the global eradication of polio — would surely rank among humanity's greatest achievements.

Just a generation ago, polio was spreading fear around the world



The Global Fight Against Polio *(cont'd from P11)*

In the first half of the 20th century, many cities around the world suffered through horrible epidemics of polio. The disease can spread through contaminated food and water, especially in places with poor sanitation and hygiene. To turn the tide, scientists worked tirelessly on a vaccine.

It was Jonas Salk who developed the first successful polio vaccine — the inactivated poliovirus vaccine. The development of a working vaccine was announced on 12 April 1955. It was celebrated as *"more than a scientific achievement,"* according to Salk's biographer Richard Carter. *"People observed moments of silence, rang bells, honked horns, blew factory whistles, fired salutes."* The vaccine *"was a folk victory, an occasion for pride and jubilation."*

These celebrations were not misplaced. Another vaccine — the oral poliovirus vaccine — was developed by Albert Sabin soon afterward, and both vaccines made it possible to end the terrible epidemics of the past. By 1979, wild poliovirus was entirely eliminated from the US. Millions of children who would otherwise have been paralyzed instead lived healthy lives.

Although the oral poliovirus vaccine (OPV) was easy to provide at scale because it was an oral pill, it had the problem that the altered live poliovirus used within it could mutate and, in rare cases, could regain its ability to attack the central nervous system. Since 2020, the world has also had new effective vaccines called *novel Oral Poliovirus Vaccines* (nOPV), which can be used to prevent cases of vaccine-derived poliovirus.

The big chart shows how far the world has come in its fight against polio. As recently as the 1980s, hundreds of thousands of people

worldwide became paralyzed by the virus every year. Since then, the efforts against polio have been successful in more and more regions of the world, and the spread of the virus has been contained greatly, as the chart shows.

This global reduction of paralytic polio cases is only part of the success. There were previously three different serotypes of wild poliovirus, and immunity to one serotype does not confer immunity to the other two. Two of them were eradicated in the last decade:

- The last case of wild poliovirus serotype 2 was seen in 1999 in India. It was declared globally eradicated by the WHO in 2015.
- The last case of wild poliovirus serotype 3 was seen in 2012 in Nigeria and declared eradicated in 2019.

The maps below the chart show how polio was eliminated in more and more countries. Back in 1980, polio was still endemic in 147 countries around the world. By 2000, North and South America were certified to be polio-free. Twenty years later, most regions in the world are certified to be free of polio.

A global vaccination campaign made this success possible

The chart shows how this was possible. Back in 1980, only 1 out of 5 of the world's infants got vaccinated. By now, that ratio has flipped, and 1 out of 5 are not vaccinated.

People around the world — all of us — contributed to this global success. First, by ensuring our children get vaccinated. And second, because much of the relevant work was paid for by public funds through our taxes.

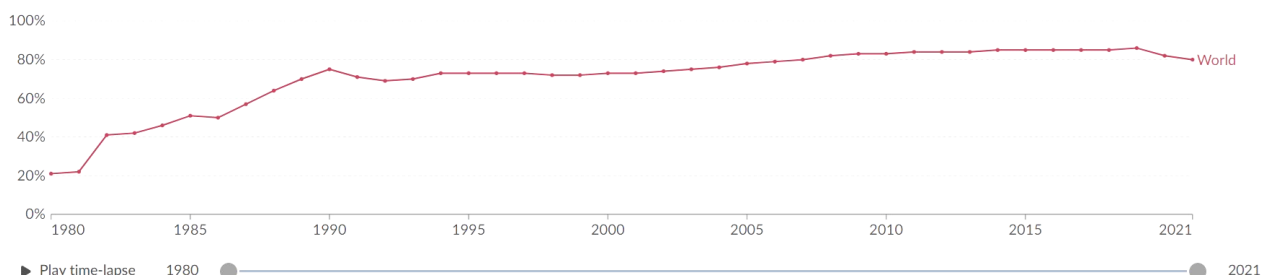
Share of one-year-olds who are vaccinated against polio

Share of one-year-olds who have received the third dose of polio-containing vaccine. This may be either the oral or the inactivated polio vaccine.

Our World
In Data

Table Map Chart

Edit countries and regions



Data source: WHO; UNICEF (2022) - [Learn more about this data](#)

Note: Polio is a highly infectious viral disease. The polio virus invades the nervous system and can cause irreversible paralysis.

OurWorldInData.org/polio | CC BY

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*Share of one-year-olds who have received the third dose of polio-containing vaccine.
This may be either the oral or the inactivated polio vaccine.*

The Global Fight Against Polio *(cont'd from P12)*

For our generation today, polio eradication is within reach

The charts also show that during the COVID-19 pandemic, the vaccination rate against polio fell, and the number of cases increased.

But, despite the setback due to COVID, we are in a much better position than the generations before us. As we've seen in the three maps above, the disease has been eliminated from most countries in the world. The last remaining wild poliovirus is only prevalent in two countries. Today, our generation has the chance to achieve one of the most ambitious goals humanity can possibly set for itself, the global eradication of a disease.

We should not make the mistake of becoming complacent now that we've come so far. Going from low numbers to eradication is hard. It will depend on our efforts now to make this happen and eradicate polio once and for all.

But it is possible. The world has already eradicated one of the very worst human diseases: smallpox — a disease that is estimated to have killed at least half a billion people in the last 100 years of its existence — which was eradicated in 1980.

We know what we need to end polio globally:

- Widespread access to the *novel Oral Poliovirus Vaccines* mentioned earlier, which don't carry the same risk of rare vaccine-derived poliovirus infections.
- Access to clean water and sanitation facilities for everyone.
- And good data, as my colleagues Saloni Dattani and Fiona Spooner emphasized in their article on the importance of testing and data in the fight against polio. Only by testing widely can we make sure to detect every last case of polio so that we can protect those around them.

The data in this article have shown how very far we have come. Now, let's bring this global project to an end and eradicate this disease for all children around the world and for all who come after us. 🌍

Max Roser (2024) — "The global fight against polio — how far have we come?" Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/global-fight-polio> [Online Resource]

Indonesia's Unexpected Polio Outbreak

By [BNN Correspondents](#)

Source: bnnbreaking.com — 19 January 2024

Indonesia is grappling with a polio outbreak, a decade after being declared polio-free by the World Health Organization (WHO). Eleven cases have surfaced in the East Java province, predominantly on Madura Island, leading health officials to label the situation an 'extraordinary event'.

A Potential Setback in Global Health

The outbreak's detection is alarming, given that Indonesia was declared polio-free in 2014. Preliminary investigations indicate that the virus might have been circulating undetected, with three cases found between October 2022 and February 2023. Among the afflicted children, nine were asymptomatic, while two showed clinical symptoms requiring intensive care.

The resurgence of the disease is attributed to the high mobility of the population and disruptions to immunization programs caused by the COVID-19 pandemic. A joint study by the University of Sydney and Universitas Indonesia highlighted a significant decline in health services, including vaccine access, during the pandemic. This disruption led to many children missing out on timely vaccinations.



Responding to the Crisis

In response to the crisis, Indonesian health authorities have launched a mass immunization campaign aiming to vaccinate 8.4 million children aged 0-7 years in Central and East Java, and Yogyakarta. As per the latest report, 42.6% of the targeted children have received their first dose.

In December 2023, the WHO issued its first-ever prequalification approval for the novel oral polio vaccine type 2 (nOPV2) under its Emergency Use Listing regulatory pathway.

Indonesia's Unexpected Polio Outbreak *(cont'd from P13)*

Since its launch in March 2021, the Global Polio Eradication Initiative (GPEI) has delivered nearly 1 billion doses across 35 countries.

Strategic Measures to Halt the Spread

Experts suggest that mass vaccinations alone will not suffice to curb the outbreak. Strengthening community engagement, enhancing vaccine acceptance, and ramping up environmental surveillance are all crucial elements in controlling the polio spread.

Rotary International, a longtime ally in polio eradication efforts, has extended a \$14 million grant to Nigeria to support polio surveillance activities and halt the spread of all forms of poliovirus. This proactive approach could serve as a blueprint for Indonesia in its battle against the polio resurgence.

The situation in Indonesia underscores the need for robust health infrastructure, continuous surveillance, and the ability to swiftly respond to health emergencies. As the fight against polio continues, the world watches, hoping for a swift resolution to this unexpected outbreak. 🌐

Emergency Polio Vaccine Drive In Zimbabwe

Zimbabwe starts an emergency polio vaccination drive after detecting cases caused by a rare mutation

By **Farai Mutsaka**, Associated Press

Source: [africanews.com](https://www.africanews.com) – 21 February 2024

HARARE, Zimbabwe – Zimbabwe began an emergency campaign to inoculate more than 4 million children against polio on Tuesday after health authorities detected three cases caused by the rare mutation of the weakened virus used in oral vaccines, including a 10-year-old girl who was paralyzed in January.

The health ministry said laboratory tests from samples collected from sewage sites in several areas of the capital, Harare, late last year showed the presence of a mutated polio virus that originated in an oral vaccine used in the global eradication effort.

In rare instances, the live polio virus in vaccines can mutate into a form capable of sparking new outbreaks, especially in places with poor sanitation and low vaccination levels.

The number of polio cases globally has dropped by more than 99% since the global effort to wipe out the disease led by the World Health Organization and others began in 1988. But the majority of children being paralyzed by polio these days are being crippled by a virus that was originally linked to a vaccine.

Vaccination teams in Zimbabwe are moving from house to house to deliver more doses to protect children, while others will be stationed at health facilities, authorities said.

Officials said it was the first time Zimbabwe would be using a new oral polio vaccine specifically designed to reduce the risk of the virus within it mutating into a dangerous form.

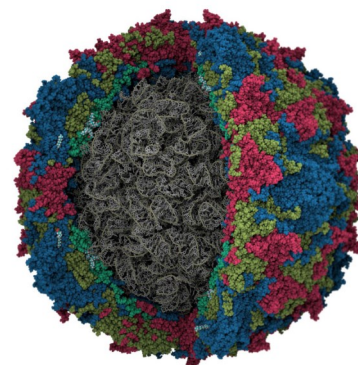
Zimbabwe aims to roll out more than 10 million new vaccine doses targeting just over 4 million children below the age of 10 in two rounds in February and March. More than 95% of that population needs to be immunized against polio to stop new outbreaks.

Last year, the wild polio virus caused a dozen cases in Afghanistan and Pakistan, the only countries that still have that virus. In comparison, polio viruses linked to the vaccine caused more than 500 cases in nearly two dozen countries globally, mostly in Africa.

Zimbabwe last reported a wild polio virus case in 1986, according to the United Nations children's agency.

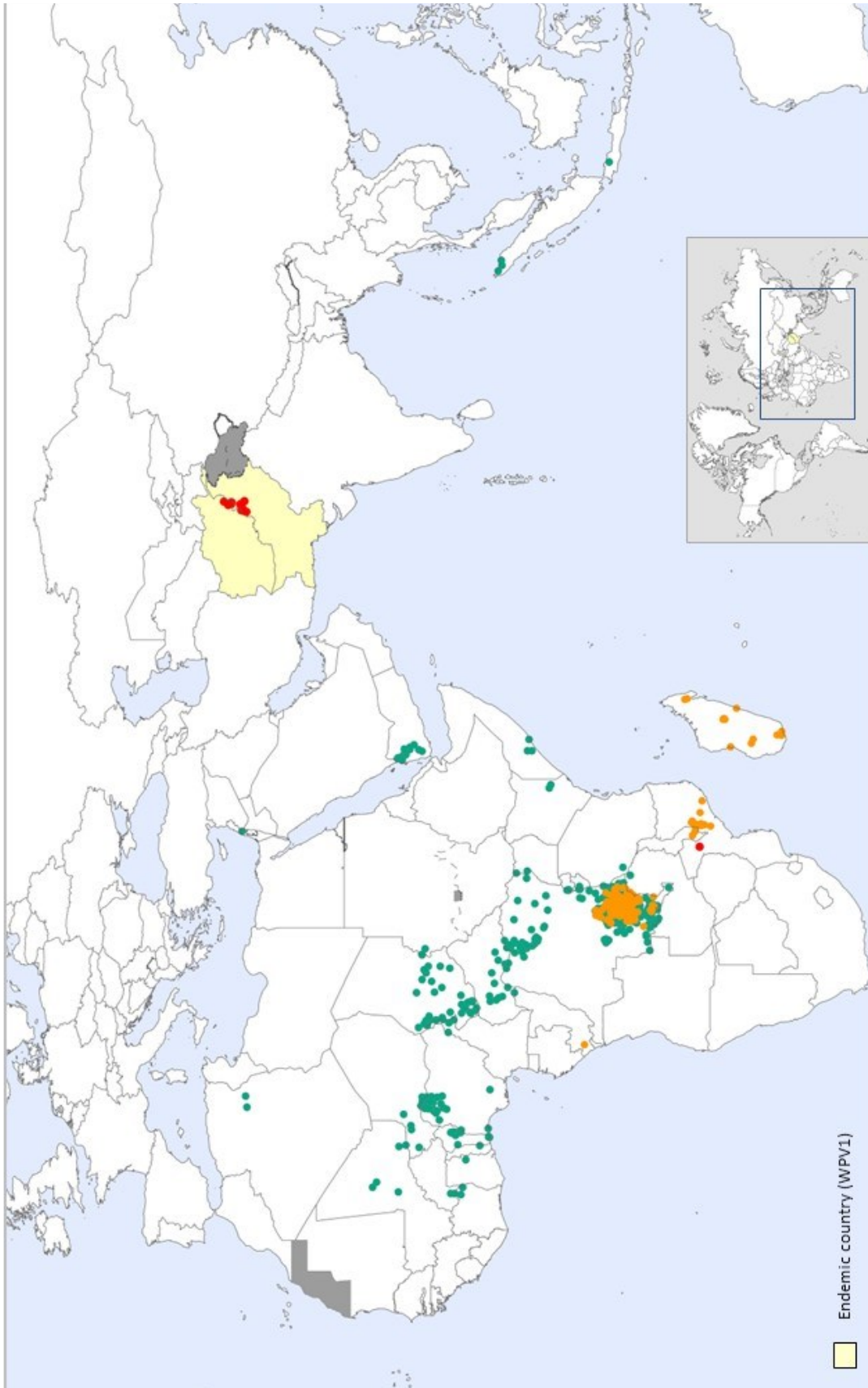
Zimbabwe Health Minister Douglas Mombeshora called the new detection of polio "*a serious concern*" but said they were prepared to respond swiftly. The health ministry said it was collaborating with health authorities in at least five other African countries that had recently detected polio viruses through environmental sampling and routine surveillance.

Polio can cause total paralysis, and children under 5 are especially vulnerable. It is transmitted from person to person, mainly through contact with contaminated feces, water or food. 🌐



Polio Now

Global WPV1 & cVDPV Cases¹, Previous 12 Months²



Wild Polioviruses (WPV)

Circulating Vaccine-Derived Polioviruses (cVDPV)

● WPV1 cases (latest onset)		
Pakistan	7	11-Jul-23
Afghanistan	6	18-May-23
Mozambique	1	10-Aug-22
● cVDPV1 cases (latest onset)		
DR Congo	172	11-May-23
Madagascar	19	03-May-23
Mozambique	15	27-Feb-23
Malawi	3	01-Dec-22
Congo	1	15-Oct-22
● cVDPV2 cases (latest onset)		
Nigeria	29	13-Jun-23
CAR	14	09-Jun-23
Burkina Faso	2	04-Jun-23
Kenya	2	27-May-23
Tanzania	1	26-May-23
Chad	43	25-May-23
DR Congo	274	15-May-23
Côte d'Ivoire	2	05-May-23
Mali	5	28-Apr-23
Zambia	1	08-Apr-23
Benin	11	15-Mar-23
Somalia	3	02-Mar-23
Indonesia	4	20-Feb-23
Israel	1	13-Feb-23
Niger	5	25-Dec-22
Cameroon	3	22-Dec-22
Yemen	16	14-Dec-22
Algeria	2	13-Dec-22
Burundi	1	24-Nov-22
Sudan	1	31-Oct-22
Togo	1	30-Sep-22
Ghana	1	14-Sep-22

For more country information, visit the respective pages within the [Outbreak](#) and [Endemic](#) country sections of the GPEI website.

Health Worker Education Program (HWEP) Schema

Cont'd from P4



2023 STRUCTURE

PERSONNEL:

Clinical Health Educator
Administrative Officer

ACCOUNTABILITY:

Polio Australia Board, State
Members, Grantees, Funding
Providers

SUPPORT:

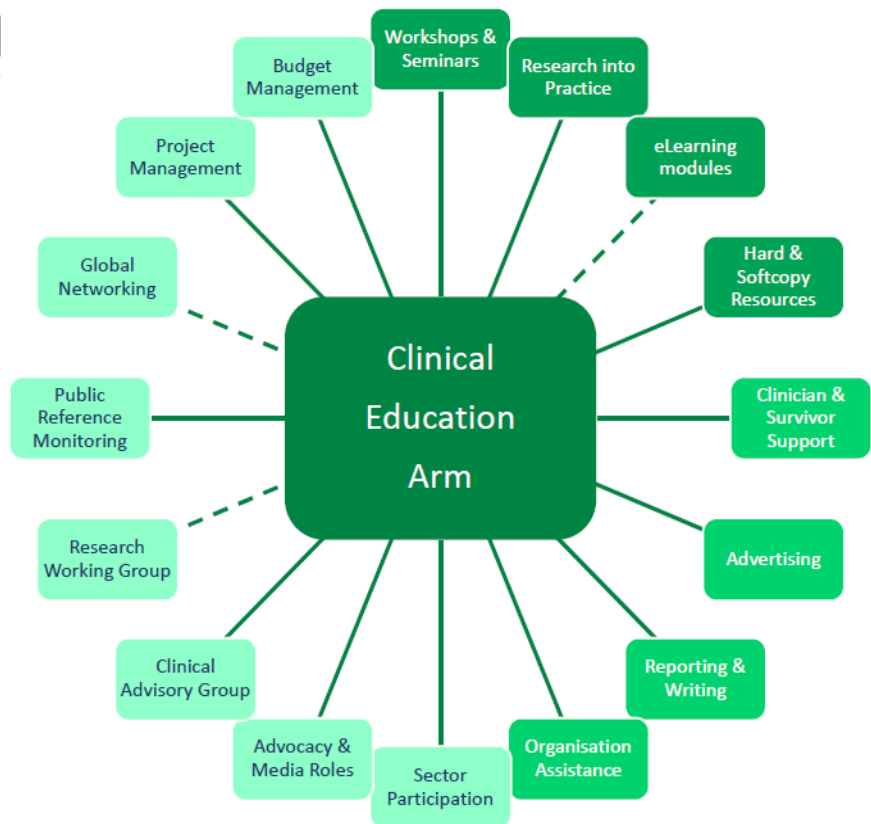
Executive and other Polio Australia
Staff

STAKEHOLDERS:

Polio-Affected People
Clinicians
Clinical Advisory Group
Research Working Group

KEY:

Darker activities carry most weight
Developed activities ———
Need to be developed - - - - -



<https://drive.google.com/file/d/1oisx3w-UAJr21jFOa7pXIjINSj7i5eE/view>