

# COMPASS

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*Training community health workers in Efaye clinic, KwaZulu-Natal*

## MOBILE PHONES: GOOD FOR YOUR HEALTH?

**SINCE AUGUST 2014 pregnant women and new mothers in South Africa can sign up for regular SMS communications to help them along their pregnancy and look after their baby's health. Anthony Huszar writes about the country's first national mobile health (mHealth) service.**

MomConnect seeks to help women and girls have the healthiest possible pregnancy, registering them on a

national database and sending them targeted health advice during their pregnancy, and in the first year of their child's life. It marks a huge step forward for mHealth supporters in the African region and for women in South Africa, and tackles Millennium Development Goals (MDGs) 4 and 5 – to reduce child mortality and improve maternal health.

The project is part of the SARRAH programme, a five-year health systems

strengthening initiative supported by the UK Department for International Development (DFID) and managed by HLSP. The programme provides technical support to South Africa's Ministry and National Department of Health and their partners.

### **Seed funding**

When the MomConnect initiative began in 2013, the GSM Association,

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# COVER STORY CONTINUED

an association of mobile operators and related companies, with funding from DFID, played a crucial role on the task team that was selected to realise this project. As part of their work, they commissioned research to understand the needs of pregnant women and mothers. Results showed that, with 94–96% having access, the mobile phone was the most effective channel for communicating public health advice, marking a significant move away from the use of television and radio for such initiatives.

Funding from SARRAH also supported Jembi Health Systems who developed rules to keep different MomConnect systems talking to each other. Additionally, Johns Hopkins University created a monitoring and evaluation framework so that the right information can be collected and analysed.

## Innovation

DFID funding has also enabled the Health Information Systems Programme, and Cell-Life, a software development non-governmental organisation based in Cape Town, to continue contributing to the mHealth sphere in South Africa. This work has included:

- Developing the mobile technology and training health facility staff to capture data using mobile phones from HIV counselling and testing and anti-retroviral treatment expansion programmes;
- Training community health workers to use mobile phones to collect household data in rural areas;
- Developing an app for pharmacists in public clinics to manage their drug supplies, freeing up more of their day to dispense drugs and to reduce stock-outs in public clinics;
- Supporting health managers to use a system where patients rate public health facilities by mobile phone; and
- Creating a secure messaging system that relies on voice, rather than text, to cater for the large numbers of illiterate people who own mobile phones in sub-Saharan Africa.

For me, these innovations all contribute in some way towards strengthening the health system and towards achieving MDGs 4 and 5. By reducing drug stock-outs, we are also addressing MDG 6 on infectious diseases. And when I attended a training session in KwaZulu-Natal for community health workers (who were all female), I saw first-hand that providing mobile phones to this important group of women allows them to be more independent, contributing to MDG 3 – to promote gender equality and empower women – highlighting that the phone is far more than just an mHealth tool.

*We must not view mHealth as a singular intervention, but rather view the mobile phone more broadly as a tool or platform from which new and existing health initiatives can be delivered better, cheaper, faster and at scale.*

## Sustainability

One notable success of these initiatives is that they are expected to be sustained without further support from DFID. For MomConnect, plans are already in place for the South African government to take full financial responsibility from USAID, who are funding the implementation and roll-out of the programme for the next two years. The SARRAH programme is supporting the development of financial models that can assist South Africa's Department of Health to reduce costs and leverage the necessary funds. It is hoped that this could then inform the Pan-African mHealth Initiative, which supports the scale up of mHealth and mNutrition initiatives to address MDGs 4, 5 and 6, spanning other sub-Saharan countries. Additionally, financial support for the other initiatives has been taken over by government departments, or by universities, who are piloting some of the software in formal research studies.

## The future

As we embark on the post-2015 agenda, a number of issues relating to mHealth still need to be addressed. We must ensure certain communities don't get left behind, by ensuring appropriate financing models that adhere to universal health coverage principles. We also need to collaborate more and form effective partnerships with those who can ensure access to renewable and sustainable power sources, on which modern technology depends, and advocate towards an era of digital readiness where users are trained to use technology appropriately.

While some policy makers still ask whether mHealth can add value, I believe the real question should be on how it can add value. We must not view mHealth as a singular intervention, but rather view the mobile phone more broadly as a tool or platform from which new and existing health initiatives can be delivered better, cheaper, faster and at scale. Proving this more comprehensively to policy makers will be the next challenge, alongside developing regulatory frameworks and inter-operability standards.

We are already starting to see education, finance and employment services increasingly channelled through mobile phones and the health sector must keep up. I hope, in South Africa at least, that MomConnect signals the first of many national health initiatives that take advantage of this technology to improve lives on the ground and build healthier communities.

**ANTHONY HUSZAR** is a public health doctor and health economist with a keen interest in mobile phones and technology. He is currently supporting the DFID funded SARRAH programme in South Africa, where he also manages their mobile health (mHealth) portfolio.

## MORE INFORMATION

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[www.youtube.com/watch?v=dUnf2loC\\_I4](http://www.youtube.com/watch?v=dUnf2loC_I4)  
Visit: [www.sarrahsouthafrica.org](http://www.sarrahsouthafrica.org)

## STRENGTHENING CAPACITY: TRF IN PAKISTAN



Community midwives at work, MNCH Programme, Punjab

**EVERY YEAR IN PAKISTAN** around 17,000 women die from complications of pregnancy and childbirth, and 400,000 children die before the age of five. Since 2009 the HLSP-managed, DFID funded, Technical Resource Facility (TRF) has supported the government of Pakistan to improve this situation by providing technical assistance for health policy, strategy and service delivery, with a focus on maternal, newborn and child health.

Following a constitutional change in 2010, Pakistan's provinces took over responsibility for planning and delivering health services from the federal government. TRF adapted from a federal focus to working

directly with provincial governments to support the development of costed health sector strategies, which have enabled government and donors to align their priorities for health. Capacity building and support for organisational restructuring have also contributed to improved health sector governance.

One TRF initiative to improve service delivery has been the support to a major national communications campaign in which radio and television programmes have raised awareness and improved practices in maternal, newborn and child health.

The training and deployment of community midwives (CMWs) – who form the backbone of the maternal and

child health strategy – has also been a focus area. On request, TRF assessed the quality of the CMW programme and made recommendations including revising the curriculum, standardising training and strengthening deployment. However some provinces have been sluggish in adopting all recommendations for improving the CMW programme. This illustrates one of the biggest challenges that the project has had to face: working in very different provinces where provincial governments have different levels of political commitment to the health sector.

Projects like TRF demonstrate that while technical assistance can support progress, there are no shortcuts to building sustainable, government-led health systems.

After the closure of TRF in 2015, work in Pakistan will continue through a new four-year project, TRF+, which will focus on reproductive, maternal and newborn health and nutrition in two provinces – Punjab and Khyber Pakhtunkhwa – and include a 'Roadmap' approach to support high level political commitment.

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## PREVENTING HIV IN SUB-SAHARAN AFRICA

**THE FOUR YEAR EVIDENCE** for HIV Prevention in Southern Africa (EHPSA) programme began in May 2014. Funded by UK aid from DFID and managed by HLSP in consortium with SAfAIDS and the University of Manitoba, EHPSA seeks to support an effective and efficient HIV prevention response in Southern and East Africa, through generating evidence of what works and why, and through improving the skill set of policy makers in using this evidence.

Sub-Saharan Africa remains the global epicentre of the HIV epidemic

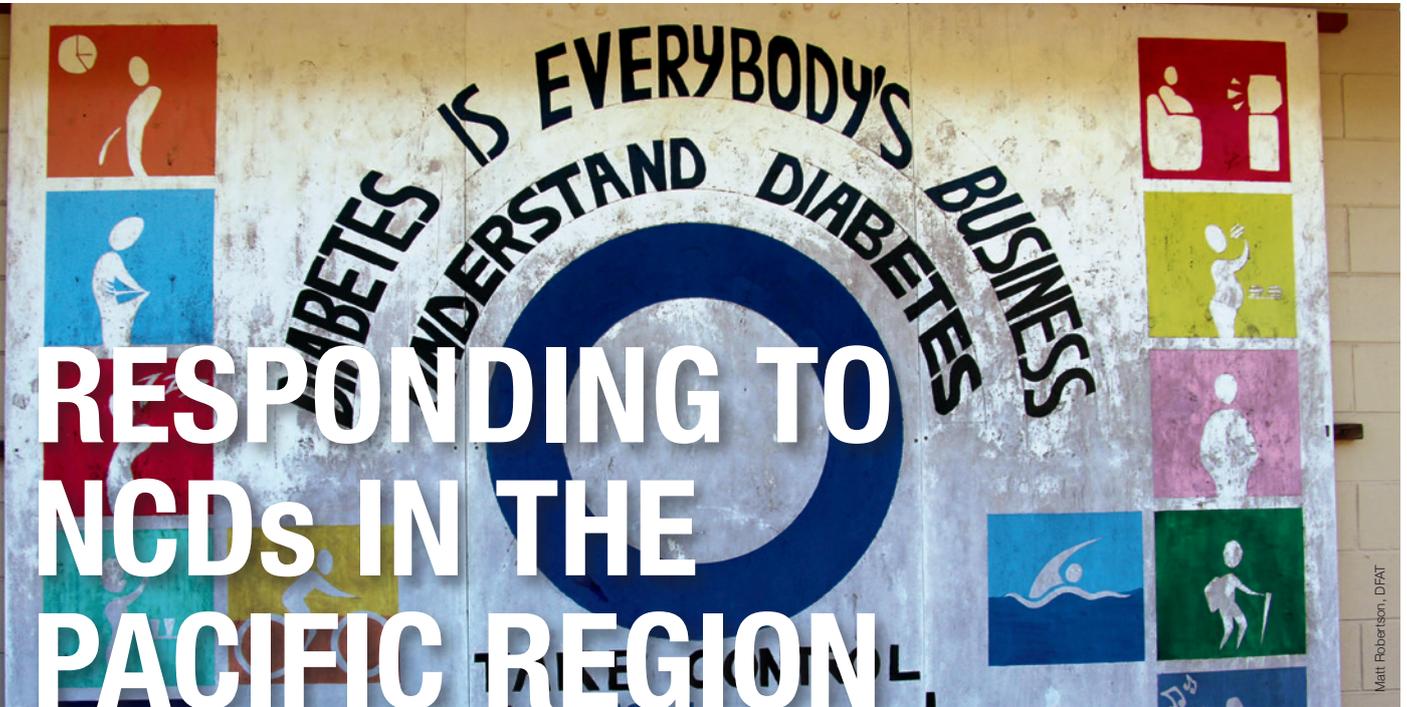
with nine countries showing an adult prevalence rate of more than 10%. In the absence of a cure or vaccine, prevention of HIV is the best way to reduce the number of new infections, and to limit the human and economic burden of the disease. This regional programme focuses on populations that are particularly vulnerable to HIV infection, including adolescents, prisoners and LGBTI (lesbian, gay, bisexual, transgender and intersex), for whom research and programming efforts have been insufficient. The

**ehpsa**  
EVIDENCE FOR HIV PREVENTION IN SOUTHERN AFRICA

impact of the programme is expected to reach beyond the target populations and the life of the programme by establishing good practice for evidence based HIV prevention.

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*Diabetes is the greatest health crisis facing Nauru*

**NON-COMMUNICABLE DISEASES (NCDs)** have become an urgent development issue that international donors can no longer ignore. While rich economies are themselves struggling to meet the spiralling costs of diabetes, cancer, cardiovascular and chronic respiratory disease at home, the impact is felt more strongly in low and middle income countries. Here health budgets are even more squeezed, and capacity to tackle other diseases and health priorities (such as maternal and child health) still weak. The costs of seeking care can be catastrophic for individuals and communities due to the chronic nature of NCDs, and the fact that they affect a large proportion of the working age population. However, external funding has traditionally been tiny and not proportionate to the disease burden.

In the Asia Pacific region around 70% of deaths are from NCDs; many of these are premature (before the age of 60) and preventable. The Mott MacDonald-managed Health Resource Facility for Australia's Aid Program has been looking at current practice in addressing NCDs in the Pacific region to inform the thinking and response of Australia's health program.

### **Burgeoning costs**

Analysis from Tonga shows that demand for NCD services will soon outstrip the government's ability to fund them. NCD in-patients already cost twice the average cost of a non-NCD patient. In Samoa, dialysis consumes almost 10% of the entire health budget. Similarly in Kiribati costly off-shore referrals for tertiary care are fast increasing and expected to cost almost 10% of the health budget in 2014.

### **A more rational use of health services**

Pressure on health budgets suggests a need for efficiency and for rationalising use of services by providing these at the lowest appropriate level of the health system. For example, a key theme of the DFAT-supported Tonga Health Systems Support Program is to shift resources from the acute hospital sector to primary and secondary prevention at the community level. In Kiribati, a pilot health outreach program provides door-to-door screening for, and management of personal risk factors for diabetes (including obesity) and other NCDs in adolescents and adults.

### **Deployment of health workers**

In Tonga, one strategy has been to introduce a cadre of NCD nurses

to address health concerns at the community level and reduce risk factors such as poor diet, lack of physical exercise, smoking and alcohol consumption. This has been done by providing 30 weeks of specialist training to existing senior nurses. The risks and benefits of upskilling a cadre of workers are going to be examined in a planned evaluation of the strategy.

### **The role of health promotion**

Lessons from programming in other areas show that health promotion needs to go beyond simply raising 'awareness' of risky behaviours, and target sustained behaviour change in people's lifestyles, which is very difficult to attain. Promoting multiple behaviour changes at the same time has not been successful in the past.

In Samoa there is high awareness of the NCD problem, but actual behaviour change lags behind. In Fiji, a focus on health promotion and disease prevention over the last three decades had little impact. Tonga has made progress in reducing some risk factors, with increased physical activity and vegetable consumption, but tobacco and alcohol use have remained unchanged, and obesity levels remain high.

### The role of taxation and regulation

Taxes on food and beverages and regulation of alcohol and tobacco sales are likely to be critical parts of a comprehensive NCD prevention strategy. There are already some interesting examples from the Pacific region. In the Cook Islands, a 33% increase in tobacco duties coincided with a decline in tobacco/cigarette sales of 20–25%.

Nauru introduced a 30% tax on all high sugary foods and drinks in 2007, but its impact has not been evaluated. An advantage of tax-based interventions is that, once implemented, they are relatively easily sustained. They are self-funding and tend to become accepted by the public fairly quickly.

### Lessons for international donors

Development assistance has the potential to contribute to the reorientation and strengthening of health systems, including in directions that strengthen the NCD response. However, NCDs should not compete for resources with other important health priorities; rather, they should be considered as an opportunity to reinforce health system strengthening.

Synergies can be sought, for example by encouraging links between maternal and child health and NCD management, such as around maternal health and nutrition. Maintaining a focus on equity, access for the poor and marginalised groups may also be useful in highlighting common agendas.

The risk is that donors develop a portfolio of ‘scattergun’ NCD investments or address NCDs through vertical routes. By ensuring that NCDs are tackled in an integrated manner that supports overall health systems strengthening and integrated service delivery, some of the global aid effectiveness mistakes of the past can be avoided from the start.

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## DELIVERING ‘EMBEDDED’ EVALUATIONS IN HEALTH AND DEVELOPMENT

**TRADITIONALLY**, our evaluations were undertaken at mid-point or at the end of a programme. This approach is known to have limitations, because in order to measure impact, results or value for money *at the end* of the programme, evaluators need to ensure that the expected results have been clearly defined, and that the right information and data will be collected *at the start* of the programme. This can involve thinking about data requirements before implementation to draw the baseline picture that the intervention is expected to change. This assessment has often been weak in many development programmes, resulting in many inconclusive – as well as costly – end-of-project evaluations.

The concept of embedded evaluations has been embraced by several development agencies and clients whereby two companies are contracted – usually through open competition – one to implement the programme and the other to deliver evaluation services. Typically the two companies are contracted at the design stage, so they can work together on design and measurement issues. The two organisations have different mandates for this joint work so that the implementing agency can design the programme as it deems appropriate, and the evaluation agency can provide impartial and externally validated results. As not everything can be measured affordably in development and health, an effective partnership during design is essential for all parties – implementers, evaluators and clients – so they can be clear about the outcomes expected to be achieved and whether these can be measured. In technical terms this is about agreeing on the theory of change and the linked results chain.

Since 2013 we have been implementing embedded evaluations for clients such as DFID, the World Bank and the Bill and Melinda Gates Foundation, in countries including Ethiopia, Kenya, Nepal, Tanzania and Zambia.

Embedded evaluations have been mostly welcomed by the health and development community because of their potential, but they also present their own challenges and risks. They require the evaluation agency to develop effective working relationships with the implementing agency and with the client within a very short time. The evaluating agency’s detailed assessment of expected results and available data undertaken at the start of the programme may be perceived by the implementing agency as unnecessarily detailed, a cause for delayed implementation, or giving evaluators too much of a say in programme design. Evaluation services need to be timed and costed based on the timeframe proposed by the implementing agency – this is prone to delays which can affect the evaluation agency’s ability to deliver the contractual milestones (on which payments are based), which are increasingly common in output based contracts. Embedded evaluations require a significant effort to ensure effective information sharing, communication and coordination among the two agencies and the client. These challenges are often unknown, underplayed and under-budgeted, and prove taxing for both agencies.

There are also challenges to the clients commissioning this type of evaluation. Ensuring effective partnerships between implementing and evaluation agencies increases the amount of work required and transaction costs, as does the complexity of attempting to read across evaluation results applying to different sectors, priorities and geographical areas.

Embedded evaluations will require regular dialogue and lesson learning between clients and agencies to strengthen partnerships in development for results. However, they are a most welcome change, as they provide an opportunity to significantly improve evaluation quality. This will help donor agencies to make spending decisions based on more solid evidence of what works.

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## CASH TRANSFERS FOR ORPHANS IN SWAZILAND

ANOTHER STEP TOWARDS SOCIAL PROTECTION



Queuing for health services at a community clinic in Swaziland

**SWAZILAND HAS VERY HIGH NUMBERS** of orphans and vulnerable children (OVC) – almost 10% of the population are orphans. The rapid increase in HIV prevalence in the early 2000s and a health system unable to respond effectively to the epidemic resulted in a high mortality rate and an increased number of orphans. In response, the Government has committed to design and implement a pilot cash transfer scheme (CTS). The scheme is designed to provide regular and predictable cash transfers to poor households with orphans and vulnerable children, promoting household and educational outcomes and human capital development.

Mott MacDonald worked with the Deputy Prime Minister of Swaziland's office to design the cash transfer scheme based on international evidence and lessons, as well as the specific country context.

*“Clear elaboration of the Government’s rationale behind the design as a social protection intervention is critical, as is learning from pre-existing systems and projects.”*

Over a two-year period, we reviewed international practice, explored and determined the size of the grant, developed the implementation manual, trained the Department of Welfare at national and regional level and trained over 60 enumerators (field workers who implement the system and collect and validate data) and monitored the pilot of the registration of households. Based on feedback, we refined the implementation manual and system.

Targeting and enrolment forms were developed to determine a proxy

means test (PMT) to identify eligible households. The PMT scoring created a ranked list of all surveyed households from chronic poverty to ‘non-poor’ households with OVC. Households selected by community processes and the PMT score are being invited to enrol in the scheme. The first phase was conducted from 7th April 2014 to 16th April 2014 and the second phase was implemented from 19th May to 24th May 2014. 8800 households were surveyed by the targeting teams during both the phases. The cash transfer grant is not conditional on beneficiaries, however children are encouraged to attend school and access health services.

The implementation manual aims to assist all implementing agencies, and to ensure transparency, compliance and accountability in the operations. The Ministries of Welfare, Education and Health have been integral in the design and development of the scheme, particularly as health and educational outcomes are critical success components in the longer term.

Valuable lessons have already emerged. Clear elaboration of the Government’s rationale behind the design as a social protection intervention is critical, as is learning from pre-existing systems and projects. However approaches need to be customised to fit local context, including cultural and community norms, and resource availability. Stakeholder engagement and sound process are crucial to ensure understanding and support on key issues, including the operational definition of vulnerability, the importance and objectives of various controls, limits on the size of cash transfers, and the input of sectors such as health and education into system design.

**MORE INFORMATION**



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## MANY WAYS OF INVESTIGATING VALUE FOR MONEY



VfM studies can show how effective one intervention is compared to another

**EVERYBODY WANTS TO ACHIEVE 'VALUE FOR MONEY'**, but what does it actually mean? A recent internal review of Mott MacDonald's experience with value for money (VfM) analysis illustrated that in practice VfM is interpreted in a broad variety of ways. At its most literal, a VfM analysis is extremely data-intensive, because it requires information about both 'value' (benefits and impact) and 'money' (costs). On the other hand, some useful insights about VfM can be obtained relatively quickly, for example by benchmarking a project against publicly available information.

### Best practice

DFID defines Value for Money (VfM) as 'maximising the impact of each pound spent to improve people's lives', and regards it as an important consideration within evidence-based decision-making. DFID assesses VfM by looking at 3Es – economy, efficiency and effectiveness:

**Economy.** Are the costs of inputs (such as drugs, construction, consultants) as low as possible? The aim is to have the lowest possible lifetime cost of inputs, whilst ensuring that they are fit for purpose.

**Efficiency.** How well are inputs converted into outputs? For example, patients treated per nurse per day. Are we managing the intervention in the best way to maximise outputs?

**Effectiveness.** How far do outputs lead to the intended outcomes and impact? Have we chosen the best type of intervention to achieve the most outcomes with available resources? For example, how well do immunisation rates convert into reduced child mortality? Or should we have chosen another intervention – for example, nutritional support – to optimise outcomes?

Our internal review revealed that different programmes use different methods to measure VfM. For example:

### A major grant to academia

Our client asked for a rapid analysis of whether a multi-million dollar academic grant was providing value for money. A basic comparison of input costs was carried out, using a published survey by the US College and University Professional Association for Human Resources. Observations included: (a) that the senior academic staff were paid considerably more than in other comparable eminent institutions and

(b) that the administrative costs constituted an unusually low percentage of total costs. The analysis could not conclude whether these differences were 'good' or 'bad', but the information was used alongside other evidence about the academic outputs to make recommendations about future funding.

### Funding for priority surgical operations in a low-income country

Our client asked for the cost of a scheme they were funding to be compared with another scheme providing the same clinical treatment. The comparison found that overheads were significantly higher in the client funded scheme due to the other scheme being delivered through government hospitals and so incurring lower overheads: in DFID's terminology it was less economical. However when the surgical success rate was compared to the international average, the scheme was shown to be comparable. The scheme could be said to be efficient because of its high quality.

### Upstream funding to support education in schools

Funding was provided to central government to improve secondary schooling. The government was given considerable flexibility on how it spent the money. Our client requested a full VfM analysis covering economy, efficiency and effectiveness, but also asked for an analysis of equity. The costs of the programme were compared to appropriate local, regional and global unit costs, using the best comparators available. The analysis demonstrated that the funding was unlikely to provide either VfM or greatly enhanced equity, indicating that the money could probably be better allocated elsewhere.

These three examples show that a VfM analysis can be anything from benchmarking costs to comparing the costs of sophisticated measures of output (such as successful surgical interventions). It is always important to be clear about what the client expects from their VfM review and what they are prepared to pay for it. To go back to where we started, VfM analyses must, of course, themselves produce value for money!

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Taking a break in Groenkloof Nature Reserve while supporting DFID's SARRAH programme

## REMEMBERING JOHN JAMES

**OUR COLLEAGUE JOHN JAMES**, Lead Specialist for Child Health, died on 26 April 2014 from pancreatic cancer. John had an outstanding career combining many years in general practice in the UK with international work. His honorary appointments show the respect he had from medical peers: Examiner for the Royal College of Physicians (UK); visiting Professor of Primary Care, Capital University Beijing, China; visiting Fellow at the School of Public Health, Harvard; and Clinical Tutor in Child Health at the University of Bristol.

### A truly global career

John started working with HLSP in 1994. Following the collapse of the Former Soviet Union, he worked in many Balkan countries and post-Soviet states helping reform primary health care systems, including in Tajikistan, where the gun-carrying Minister of Health personally guaranteed his safety. He then went on to work all over Africa and Asia.

### Leaving a lasting impression

John's personality and zest for life left their mark on all he met. The tributes from colleagues and clients describe him as – 'an amazing man', with 'professional integrity', 'always willing to help', 'an extraordinary person' – and above all from everyone – 'always positive and great company'. One of John's gifts was always having time for everyone, seeing the best in all his colleagues and acting as a great mentor to younger staff members. A gifted story-teller, he always came back from his trips with fascinating stories that truly brought to life his work in the field.

Mark Pearson recently visited a health centre in Kyrgyzstan where he introduced himself as from HLSP. The stern head of the centre seemed distracted during the meeting and kept rummaging in her desk. Eventually she pulled out an old business card and said 'Ahah HLSP – John James'. She had kept it for ten years!

### Always the doctor

John generously shared his medical knowledge. When climbing Mount Kilimanjaro in Tanzania he thought nothing of deviating from his own climbing holiday to help a stranger who was suffering from severe altitude sickness down the mountain. That was John all over – the humanity, the kindness and always the doctor.

John spent a lot of time in his last few years working in South Africa where he worked tirelessly to help the National Department of Health introduce general practice into the public health system. The team has been overwhelmed by the flow of tributes. Not all were work related. The DFID senior health adviser noted how cross he had been when John – just four weeks out of chemotherapy – beat him soundly in the 65 mile Round Table Mountain cycle race.

John approached his final illness like he did the rest of his life, head on. His courage and positivity were extraordinary. He never let his illness define him: passing away in the Maldives was a life statement in itself.

His work touched many lives, as did his endless enthusiasm and propensity for fun along the way. He was an inspiration to us all.

## HLSP WORKING TO IMPROVE WORLD HEALTH

HLSP provides technical assistance in the health sector, and programme management and policy advice to international agencies and national governments in developing countries. Our expertise ranges from health systems strengthening to cross-cutting issues related to aid effectiveness.

We have experience working with both the public and non-state sector and in fragile states. Our services are tailored to reflect not only our client needs but also those of the country in which we are working.

Through the HLSP Institute, we share our knowledge and experience and contribute to policy and debate on global health issues and development practice.

HLSP is supported by an in-house team of technical specialists and 8000 external consultants offering a broad range of health sector skills including health policy and planning, sector financing, governance, gender, and capacity development.

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