A community approach to diabetes care – doorstep delivery

Rural India faces an acute shortage of healthcare professionals. In an innovative initiative called ‘Addressing the Base of the Pyramid (BoP)’, Novo Nordisk teamed with community partners to bring diabetes services closer to people in the remote areas while supporting health-activists’ microbusiness. This initiative is now integrated with the Changing Diabetes® Barometer programme in the state of Bihar to increase the outreach.

Sangeeta Devi sits on the dusty ground outside a small, rural home. In front of her sits a middle-aged woman, whom Sangeeta asks a series of questions. The woman complains of feeling tired. Sangeeta takes out a glucometer and tests the woman’s blood sugar.

Sangeeta is an Accredited Social Health Activist (ASHA) in Sampatchak, a town of 112,000 people in the east Indian state of Bihar. In a country with a severe shortage of healthcare professionals, ASHA is a pillar of the National Rural Health Mission’s strategy for improving the proximity and affordability of basic healthcare services in rural India. Armed with knowledge and a supply kit, people like Sangeeta bring hope and healing to millions of Indians who still struggle with fundamental public health issues and infectious diseases nearly forgotten in the West.

1 Novo Nordisk’s Base of the Pyramid (BoP) initiative provides access to insulin and quality diabetes care to the working poor in a scalable, sustainable and profitable way. Local health authorities and partners are currently implementing BoP projects in Ghana, India, Kenya and Nigeria.
2 National Rural Health Mission was launched by the Indian government in 2005 to provide accessible, affordable and quality health care to the rural population.

For more information see www.rethinking-the-medicate.com

Sangeeta Devi testing a woman’s blood sugar outside a small rural home in Bihar.
Those problems command the focus of India’s health system. As such, few ASHAs have the skills to address non-communicable diseases such as diabetes. To improve ASHAs’ capabilities and the health of the communities they work in, Novo Nordisk piloted the Base of the Pyramid initiative in Sampatchak and trained 32 ASHAs in basic diabetes knowledge and counselling.

The initiative proved so successful that it has been integrated with the Changing Diabetes® Barometer programme of Novo Nordisk Education Foundation (NNEF). NNEF has recently signed a memorandum of understanding with the Bihar state health society to train 300 more ASHAs in the basics of diabetes care who will be deployed at 10 primary care diabetes centres in the state.

According to Deepa Sinha, another ASHA worker in Bihar, “this will help diabetes patients from my village get good care closer to their home,” she says. “They can get easy access to diabetes care, for which currently they have to travel far.”

**Scarce resources**
In India, there is less than one doctor for every 1,000 people – less than half the global average. In some primary care clinics, a doctor might see between 20 and 100 patients a day, depending on the season.

Overwhelmed by such conditions as malaria, leprosy, tuberculosis, and HIV, “manpower is low for handling diabetes,” says Dr. Rebha Krishori, medical officer at a primary care centre in Dahod, Gujarat.

Not only is there too few doctors, many remote primary care centres struggle with too few drugs. Some don’t have insulin, forcing them to refer people with uncontrolled diabetes to a hospital, often far away. That compounds the problem; patients who can’t afford to travel or take time off of work either settle for suboptimal care locally or take a risk of buying counterfeit drugs in the open market.

And then there is too little awareness. “We run a diabetes outpatient department every Saturday. The challenge is that patients with diabetes are not coming for treatment,” says Rebha. “If a dedicated person could follow up with these patients, we would be able to provide them with quality care – just like with tuberculosis and malaria. The ASHA workers can play a big role in increasing awareness of diabetes.”

**Meet the ASHA**
Appropriately, asha means ‘hope’ in Sanskrit. The ASHA is a link between the public health system and the community, and often is the first point of contact in underserved populations. Selected from their own villages, ASHAs are women between the age of 25 and 45, literate and with some formal education. They promote and deliver immunisations, make referrals for maternal health, and teach patients about nutrition, sanitation, and self-care techniques.

They bring basic medications to people’s doorsteps to help them keep healthy.

Each ASHA has responsibility for 1,000 people. “She knows every household in the village and can be effective aid in creating awareness on diabetes,” says Dr. Bharathi Bhatt, Senior Medical Advisor, Novo Nordisk India.

But ASHAs themselves face several barriers to promoting better awareness of diabetes, treatment, and complications, according to Bharathi. They are often inadequately compensated, reducing their incentives to mobilise the patients as best as possible.

They are perceived as maternal health and vaccine providers. Their lack of training in non-communicable diseases perpetuates misconceptions about their competence. “But with the right training and empowerment, ASHA workers can be agents for change,” says Bharathi.

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**ASHA worker Deepa Sinha (right) receiving her certificate as ‘lay diabetes facilitator’。”**

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3 Novo Nordisk Education Foundation (NNEF) is a non-profit organisation established by Novo Nordisk India in 1998.
**Base of the Pyramid pilot**

In March 2013, Novo Nordisk implemented the BoP pilot based on the concept of social entrepreneurship. As part of this initiative, training to 32 ASHAs to improve their diabetes care skills and economic support in the form of starter kits were provided.

Novo Nordisk India’s medical advisor taught ASHAs about types of diabetes, complications, how to recognise signs and symptoms and monitoring of blood glucose levels. ASHAs were trained to handle glucometers, counsel patients on diet and exercise, and on insulin storage and injection techniques.

Classroom sessions concluded with a written test. To combat questions about ASHAs’ competence and to provide them with future employment opportunities, ASHAs who passed the test successfully received certificates as ‘lay diabetes facilitators’.

An ASHA carries her new skills into the village. There, she promotes healthy lifestyles, refers people at risk of diabetes to a primary care diabetes centre for screening, and motivates patients to stay adherent to treatment and to visit clinics regularly – not just when they experience symptoms.

“This not only helps with early detection but also helps to reduce complications and early deaths due to diabetes,” says Bharathi. “ASHAs can also provide tips on insulin storage and hypoglycaemia management. They can play a very important role in de-centralising diabetes care to grass-root levels.”

Each starter kit provided to the ASHA comprised of one glucometer and 50 strips. The ASHAs charged a small fee (30–40 rupees, roughly USD 0.5) for the blood glucose test, thus earning some money in the process.

The entrepreneurial aspect was invaluable to Sangeeta. When her husband was injured on the job and unable to work, Sangeeta became trained as an ASHA. With her children’s tuition bills mounting,
Sangeeta’s compensation however wasn’t enough. The diabetes training she received through the Novo Nordisk pilot empowered her to develop a new client base, supplementing her income while improving the health of the community.

The programme created value for more than just Sangeeta and her family. Overall, surveys of ASHAs’ performance indicate a 25% decrease in fasting blood glucose in the patient population of the newly trained ASHAs, and a significant increase in patients’ knowledge of diabetes.

Those outcomes have caught the attention of health authorities in Bihar, resulting in the memorandum of understanding with the state health society. In the next phase of the programme, NNEF will train 300 additional ASHAs from 10 primary care diabetes centres as lay diabetes facilitators, while the state health society will provide them with incentives, glucometers and its ancillaries. If the programme is deemed effective, it will be scaled up to all 42 centres in Bihar and have the potential to reach a large number of people living with diabetes in rural India.

The project has also raised eyebrows in the industry. It scooped the ‘Pharmaceutical Market Excellence Award’ in 2013, for its innovative excellence in the provision of patient and home-care services.

“A diabetes-free Bihar”
Awards are nice, but what matters most is on the frontlines – where the impact is felt. The difference she can make in the community isn’t lost on Deepa, who was among the ASHAs certified in the pilot.

“I now know some tips that I can tell people with diabetes, like the role of healthy diet, exercise, regular medication and monitoring,” she says. “I hope to achieve a diabetes-free Bihar and, consequently, a diabetes-free India.”

5 BroadReach Analysis (2013) using Novo Nordisk BoP Programme Data (2013).