Mobile Technology to Empower Community Healthcare Workers (CHWs) and Inform Decision-makers
The Mobenzi mHealth CHW solution allows for sophisticated, turnkey mHealth interventions that build on more than a decade of experience in mobile data collection and successful CHW implementations in South Africa.

Leveraging established architectural components, frameworks and platforms each implementation can be configured and customised appropriately depending on the organisational needs to implement existing stationery, workflows and reports.

An integrated system coordinates the end-to-end solution which spans smart communication, intuitive mobile data collection, workflow, health systems interoperability, reporting, point-of-care decision support and mobile capacity-building.

Configurable building blocks allow for the different stakeholders to interact with the system through appropriate interfaces and technologies, such as mobile apps, two-way SMS and traditional web.

**Key Features:**
- Automatic report generation and custom reports allow management to monitor key indicators locally, regionally, or even globally - in real time.
- Ability for CHWs to work offline with data synchronisation taking place automatically in the background enabling them to work effectively in remote areas.
- Complete case management, intuitive data collection, real-time validation and decision-support resulting in improved service levels and higher quality reporting.
- Facilitated collaboration between CHWs, supervisors and facility staff through automated referrals, messaging and controlled data sharing resulting in improved service uptake and reduce lost to follow-up cases.

The mHealth solution consists of the following key components:
- Mobile applications for CHWs and supervisors
- Web interfaces for management and reporting
- Appropriate web and/or mobile interfaces for facilities to interact with outreach teams
- Systems integration (e.g. DHIS, OpenHIE, National initiatives)
Empowered Frontline Health Workers

Using the Mobenzi software deployed on affordable Android devices, CHWs are provided with a consolidated mobile interface which coordinates all activities including record-keeping, caseload management, screening, referral and intervention-specific functionality in line with programme guidelines and requirements.

Intelligent Record-keeping

CHWs utilise the intuitive mobile application to profile households and enroll clients, creating a central, digital record which automates scheduling and tracking of visits based on protocol guidelines and best practice. All interactions are logged and trigger appropriate workflow.

All functionality, services and content is consolidated into a single, intuitive user interface

A CHWs complete caseload is organised electronically and all records can be searched and accessed offline
Increased Engagement

Integrated team collaboration tools, real-time notifications and sophisticated screening algorithms provide real-time decision-support. Where appropriate, referrals can be generated on-the-fly.

A visit and activity diary is automatically generated for the CHW based on individual patient care plans and recommended guidelines.

The team chat functionality allows CHWs, team leaders, facilities and technical support to easily communicate and support each other.
In informed Decision-makers

With Android powered tablets (recommended) running the Mobenzi software, team leaders and supervisors can pull reports, access households, clients and referrals, as well as other routine forms and technical support as required.

Operationalising Data

Web interfaces present real-time management information to team leaders and supervisors, enabling them to get to grips with operational issues and to identify CHWs who require support and assistance to improve their performance.

Aggregated reports and indicators are updated automatically, with the ability to drill down to individual household or client level data. The reports below are examples based on the official requirements of the SA National Department of Health, but can be customised to meet reporting requirements.

Automated Report Generation

Based on requirements, mandatory report requirements can be generated automatically and made available within the management interface.

Dashboards provide real-time views of clients, households and entire communities

DHIS indicators are automatically aggregated from individual activity records

All reports, dashboards, exceptions and team indicators available via a single interface

All forms are updated in real-time based on data captured by CHWs in the field
Connecting Facilities to Support the Continuum of Care

The Mobenzi mHealth CHW solution supports and streamlines the referral process between outreach teams and facilities by relaying relevant information between the parties. Facilities may participate via a dedicated mobile device or through integration with existing clinical systems (where available).

Improved Collaboration

Referrals to local health facilities and other transversal service providers are transmitted electronically, in real-time. When a patient takes up a referral, the responsible CHW is alerted to enable appropriate and timely follow-up action. Birth reporting at facilities may also trigger automated visit instructions to ensure care is provided during the critical neonatal period.

Improved Communication

Relevant referral information is electronically transmitted to the participating facility with push notifications alerting the facility to review and capture referral outcomes. Outcomes are relayed back to CHWs or if a referral expires, the CHW is prompted to follow-up.
Flexible Facility Integration Options

Facilities may participate by:

1. Deploying a mobile device at the facility which is assigned to an appropriate member of staff to monitor
2. Accessing a secure web interface via an existing computer terminal at the facility
3. Integration into existing clinic/facility information management systems (via OpenHIE infrastructure) whereby information is automatically transferred
Health Systems Integration

The Mobenzi mHealth CHW solution is standards-based and designed to interoperate with existing health information systems. Integration can take place via a variety of mechanisms, including an open health information exchange (openHIE) architecture.

National initiatives such as MomConnect (South Africa) can also be integrated into the solution.

CHWs are able to contribute to national initiatives thanks to health systems integration

Pregnancies can be registered and women subscribed to the MomConnect messaging system
Costs, Customisation and Adaptability

The core Mobenzi mHealth CHW solution is packaged into an affordable and scalable managed service fee. Deployment consists of once-off set-up, hardware and initial capacity building costs, followed by monthly/annual operational costs which cover software, hosting, connectivity and support.

The managed service fee includes hosting, infrastructure management and includes perpetual system improvements and upgrades. Costing is calculated on a per device basis and discounted based on volume.

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<tr>
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<th>Local Deployments</th>
<th>Regional Deployments</th>
<th>National Deployments</th>
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<tr>
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<td>10 - 200 CHWs</td>
<td>400 - 999 CHWs</td>
<td>1000+ CHWs</td>
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<td><strong>mHealth Solution</strong></td>
<td>$14.00</td>
<td>$12.50</td>
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<td>Effective cost per CHW</td>
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Customisation and Adaptability

While building on core CHW structure the Mobenzi technology stack allows for solutions to be customised with relatively low cost. Any additional design elements, process flows, reports and features can be incorporated and scoped through a formal consultation process. Consultation, customisation and development are billed for on a time and materials basis.

If you are interested in tailoring the solution to meet your organisational needs, please contact Mobenzi and we will get in touch to arrange a presentation and talk through key cost considerations with you.

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1 Includes a 16.7% discount when paid annually in advance (2 months free).