ZIMBABWE HEALTH INTERVENTIONS

KNOWLEDGE MANAGEMENT STRATEGY (2021 - 2026)

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Acronyms

ACCE	Accelerated, and Comprehensive HIV Care for Epidemic Control
CIHR	Canadian Institute of Health Research
CLA	Collaboration, Learning and Adaptation
CQI	Continuous Quality Improvement
DHIS	District Health Information Software
DREAMS	Determined, Resilient, Empowered, AIDS free, Mentored, Safe
EHR	Electronic Health Records
FGD	Focus Group Discussion
GOZ	Government of Zimbabwe
ICT	Information Communication and Technology
IMIS	Integrated Management Information System
KM	Knowledge Management
KM4GH	Knowledge Management for Global Health
KPI	Key Performance Indicator
M&E	Monitoring and Evaluation
MTR	Mid-Term Reviews
NAC	National AIDS Council
NGO	Non-Governmental Organization
RISE	Reignite, Innovate, Sustain and Empower
RSS	Really Simple Syndication
SIE	Strategic Information and Evaluation
SMT	Senior Management Team
SOP	Standard Operational Procedure
ZHI	Zimbabwe Health Interventions

1.0. Introduction and Background

1.1. Vision of Zimbabwe Health Interventions
A world where all populations attain optimal health, wellbeing, and self-sufficiency.

1.2. Mission of Zimbabwe Health Interventions
To design and deliver innovative and sustainable high impact, integrated interventions for health, while working with and strengthening local communities and existing institutions.

1.3. Vision of Knowledge Management Strategy
Zimbabwe Health Interventions (ZHI) aims to be a key institution generating, managing, and sharing knowledge in health and development work, and facilitating access and use of that knowledge by other stakeholders.

1.4. Knowledge Management Goals
1. To have knowledge infrastructure and operational framework for knowledge management in place.
2. To be a key knowledge facilitator with processes in place to promote collaboration with key stakeholders via in-person and virtual mechanisms in user-friendly ways.
3. To have mechanisms in place that enable ZHI to extract, analyse, learn, and share lessons from projects and programs it implements.
4. To have systems and processes in place for sharing ZHI's own data, information, and knowledge to improve health, wellbeing, and self-sufficiency of communities it serves.
5. To influence health and development policies through knowledge captured, shared, and transferred.
6. To enhance ZHI's transparency through generation and sharing of knowledge and lessons learnt on its key processes.

1.5. Knowledge Management Strategic Objectives
Implementation of knowledge management activities will be guided by the following strategic objectives:

a) **Strategic Objective 1:** Knowledge Assessment - To discover the information needs and gaps of ZHI staff that, if addressed, can help improve effectiveness of programs and operations.

b) **Strategic Objective 2:** Knowledge Generation and Synthesis – To facilitate generation and synthesis of high impact knowledge to optimize ZHI programs and operations.

c) **Strategic Objective 3:** Knowledge Translation – To ensure effective translation of knowledge generated through ZHI programs and operations into language(s) and formats that target audience can grasp and apply.

d) **Strategic Objective 4:** Knowledge Capture and Organization – To capture and organize knowledge in formats that facilitate smooth access and effective utilization for optimization of ZHI programs and operations.

e) **Strategic Objective 5:** Knowledge Sharing – To develop and implement strategies that ensure effective knowledge sharing and dissemination within ZHI and its stakeholders.

1.6. Timeframe of Knowledge Management Strategy

This strategy is aligned to the ZHI strategic plan and will cover the period October 2021 to September 2026. The strategy will be reviewed and updated annually or whenever there are major shifts in program focus and implementation approaches.

1.7. Stakeholders and Audiences

This strategy is intended for use by ZHI senior management, technical and operations staff, as well as ZHI's sub-partners.

2.0. Knowledge Management for Zimbabwe Health Interventions

2.1. Definition – Knowledge Management

Figure 1 shows the 3 definitions that guide activities of the ZHI knowledge management unit. These definitions highlight the importance of creating synergies between data and information to help drive innovation and empower communities.

Figure 1: Knowledge management definitions

Knowledge Management

Y. Malhotra — Critical issues of organizational adaptation, survival, and competency against discontinuous environmental change. It embodies organizational processes that seek synergistic combination of data and IT, and the creative and innovative capacity of human beings

A. Bartlett — Processes of empowerment which are associated with rights-based approaches, and which seek to promote social justice for vulnerable and marginalized groups. Knowledge and learning are important elements of empowerment in that they provide the basis for strategic decision making and life choices by individuals

P. Drucker — Knowledge is information that changes something or somebody – either by becoming grounds for actions, or by making an individual (or an institution) capable of different or more effective actions

Knowledge is a resource i.e., an input necessary to the success of any organization's activities. It is also a product i.e., an outcome of experience that has value to others. In the field of health and development, knowledge is an asset most valuable when shared. To reach health and development goals, there is need to continually identify knowledge, capture it, synthesize it, share it with various counterparts, help them to use it, and help to collect and share new knowledge generated. Knowledge management is a nonlinear process that relies on good processes, appropriate technology, and, most importantly, people who have the capacity and motivation to share knowledge (Milton 2005).

2.2. Role of Knowledge Management in supporting ZHI's Strategic Plan

Zimbabwe Health Interventions believes that:

a) Without knowledge, the organization is not able to produce evidence of impact.
b) Being knowledge driven assists the organization to comply with both donor and ZHI mandates; and by demonstrating impact, the organization can develop models for use in influencing government policies and community practices.
c) Greater focus and having a concrete knowledge management strategy will foster individual and professional growth among ZHI staff and its stakeholders.
d) Having a knowledge management focus within ZHI will assist staff to remain accountable to the communities our programs serve.

2.3. Knowledge Management Systems and Products

ZHI has several knowledge management systems and products in place, and these include:

2.3.1. Human Resources: ZHI's knowledge management team is presented in Table 1.

Table 1: ZHI's knowledge management team

Officer	Key responsibilities
Knowledge Management Advisor	Head of unit and responsible for development and review of KM strategic documents, development and implementation of learning agenda, design and implementation of program assessments and evaluations, development and review of data protection policies, staff capacity building on data management, data analysis, dissemination of best practices, KM resources and product use; creating platforms for sharing information products; coordinate translation of research findings into program innovations and strategies; design and implementation of continuous quality improvement (CQI) projects and capacity building of program implementers on CQI; documentation and dissemination of best practices and lessons learnt.
Collaboration, learning and adaptation officers (X2)	Responsible for extensive analysis of routine / non-routine program data and packaging into information products; design and implementation of operational research, deep dives, program assessments and evaluations;

	translation of research findings into program innovations and strategies; support design and implementation of CQI projects and capacity building of program implementers on CQI; documentation and dissemination of best practices and lessons learnt.
Data analyst	Responsible for creating project data collection tools and database systems to store and analyse data; generate data analysis outputs including infographics, maps, tables, storyboards, and graphs to share with respective M&E and program teams; support M&E team in development of data collection and visualization tools, and application of statistical methods to complex datasets to drive clinical and operational decision-making.
Senior database officer	Responsible for administration and management of all ZHI management information systems for routine client level and aggregate data; overseeing adherence to reporting cycles; developing and implementing data security and confidentiality policies; designing and developing database applications; developing and assisting data analysis, providing technical documentation of data and quality assurance of data inputs and outputs, and providing technical support in the use of data for program monitoring and operational research.

The knowledge management team works closely with Information Communication and Technology (ICT) and communications teams.

2.3.2. Information Communication and Technology Infrastructure

ZHI has information, communication, and technology infrastructure comprising of both software and hardware. All ZHI employees have computers / mobile devices (tablets and smart phones) for their day-to-day use. Staff have access to internet which facilitates communication and dissemination of information and knowledge products through emails and the organization's SharePoint. Staff have clear lines of communication, and platforms for knowledge sharing include senior management team meetings, technical team meetings, and operations team meetings. ZHI has an Integrated Management Information System (IMIS) which facilitate on-line management of operations activities including timesheets, procurement, staff requests etc. The organization has robust Strategic Information and Evaluation (SIE) systems for all its projects and uses web-based database applications for data management, storage, and visualization by staff.

2.4. Knowledge Management Framework

Knowledge management activities for ZHI will be guided by the Knowledge Management for Global Health (KM4GH) logic model (Figure 2). The logic model shows how KM program inputs, processes, and outputs work together to achieve intended health outcomes. KM inputs (people, data and information, technology, financial resources, and infrastructure) feed into 5 processes that make up the knowledge cycle i.e., (1) knowledge assessment, (2) knowledge generation, (3) knowledge capture, (4) knowledge synthesis, and (5) knowledge sharing, that, in a myriad of combinations, creates KM outputs, or tools. Knowledge management processes are supported by a strong KM culture and strengthened KM capacity. In addition, a double-sided arrow toward

the bottom of the model, indicating "Assess needs, monitor, evaluate, and learn," emphasizes the important feedback mechanism associated with KM. The logic model illustrates how people generally move through an ''innovation-decision process'' when putting new knowledge to use, from initial awareness of the knowledge and intention to use that knowledge (learning) to using the new knowledge through informed decisions, improved practices, and better policies (action). These actions translate into strengthened systems, changed behaviour, and ultimately improved health outcomes.

Figure 2: Knowledge Management for Global Health (KM4GH) logic model
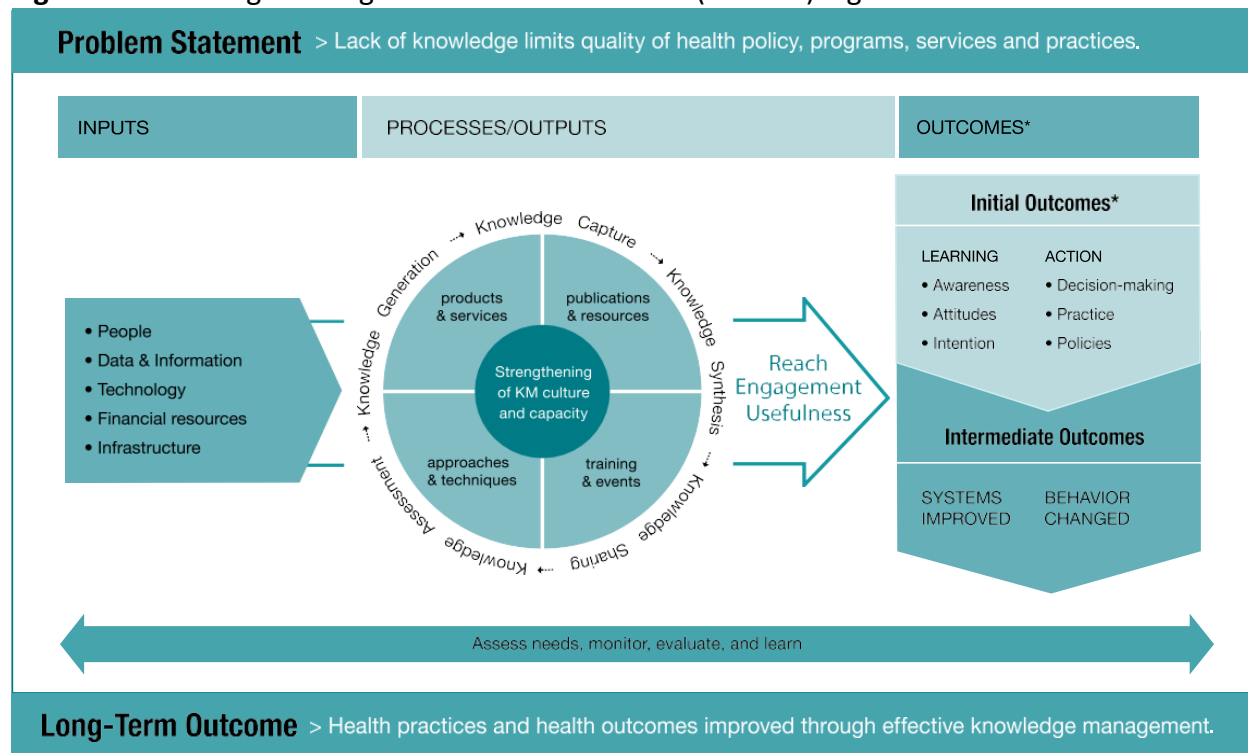
Throughout the KM process, and across the logic model, program implementers learn from needs assessment findings, program experience, research findings, and lessons learned and feed them back into inputs, processes, and outputs. The development and implementation of ZHI KM activities are meant to continuously improve in this manner. This feedback loop also ensures that KM activities are driven by and tailored to the needs of specific audiences.

KM outputs are the products or activities that result from the processes in the knowledge cycle. The logic model includes specific examples of four categories of KM activities or outputs, covering a range of high- and low-end technology solutions: (1) products and services such as websites, databases, and mobile applications, (2) publications and resources i.e., written documents, (3) training and events e.g., workshops, webinars, and conferences, and (4) approaches and techniques e.g., after-action reviews, study tours, and face-to-face or online communities of practice. These outputs are measured in terms of reach, engagement, and usefulness—basic but

important KM metrics. Reach is defined as the breadth and saturation of dissemination, distribution, or referral of a KM output. Engagement is characterized by continuous action and commitment among users of a KM output to foster knowledge flow. Usefulness relates to how practical, applicable, and beneficial a KM output is for users and can be determined by user perception and satisfaction as well as by other quality metrics. The four types of KM outputs and illustrative indicators for ZHI are presented in Table 2.

Table 2: Knowledge management outputs and illustrative indicators

Knowledge Management Output	List of Outputs	Illustrative indicators tailored to specific programmatic contexts
Products and services	Website and web portal, resource (online) library, searchable databases, eLearning platforms, mobile applications, physical resource centres, and help desks.	- Number of registered users of a help desk - Number of links to Web products from other websites - Number/percentage of users who are satisfied with usability of mobile applications.
Publications and resources	Written documents e.g., policy briefs, guidelines, journal articles/manuscripts, abstracts, manuals, job aids, standard operating procedures, and project reports.	- Number of recipients who received a copy - Number of times a publication is reprinted/reproduced/replicated by recipients - Number/percentage of users receiving a publication that read it.
Training and events	Workshops, seminars, meetings, forums, and conferences, including both in-person and online venues.	- Number of participants in a workshop - Number of sessions conducted by participants in a training of trainers - Number/percentage of participants who are satisfied with the content presented in a seminar.
Approaches and techniques	Practices for sharing knowledge such as after-action reviews, peer assists, twinning, study tours, knowledge cafés, and communities of practice.	- Number of people who made a comment or contribution - Number of times a KM technique is replicated - Number of people who liked the format of peer assists over a traditional presentation.

3.0. Knowledge Management Strategies

Knowledge management activities seek to collect knowledge, connect people to the knowledge they need, and facilitate learning before, during, and after program implementation. ZHI aims to disseminate and transform program knowledge into user-friendly formats that can be shared with internal and external audiences; this will maximize the organization's effectiveness and efficiency.

3.1. Knowledge Assessment - To discover the information needs and gaps of ZHI staff that, if addressed, can help improve effectiveness of programs and operations.

The goal of knowledge assessment is to discover information needs and gaps of health program staff that, if addressed, could help improve effectiveness of programs. KM may be a central part of the solution or could play a supporting role to other strategies. Knowledge assessment will assist ZHI to systematically review knowledge assets and how they contribute to ZHI's key activities, covering both explicit knowledge (information in documents and data) and tacit knowledge (people's skills, experience, and abilities). ZHI will typically conduct knowledge assessments periodically, and at the beginning of a project / activity to 1) assess capacity of knowledge management systems and processes, 2) determine current preferences and information-seeking behavior of staff, beneficiaries, and stakeholders, 3) identify gaps and priorities to address to meet the organization's knowledge management needs, and 4) address knowledge gaps and improve knowledge exchange systems and processes.

Knowledge assessments will be conducted to identify knowledge needs and assets within ZHI, as well as knowledge needs of current or potential consumers of the organization's products. The assessment will focus on inputs and processes levels to inform strategy design and activity development. KM leads will consider question(s) that they would like answered by the assessment; clearly defined question(s) will help drafting of relevant assessment objectives and help to ensure that everyone involved understands the purpose, focus, and scope of the assessment. Defining questions will also help leaders in deciding on assessment methodology, as well as data collection and analysis plans. The following steps will be undertaken during knowledge assessments:

1. Clear definition of the primary audience:
    a. Whether data are being collected from service providers or program managers,
    b. The level of program delivery system audience operates e.g., field, district, provincial or national,
    c. Any specific issues about the audience that makes it more important to assess their knowledge needs than other audiences,
    d. Any substantial barriers the target audience have about accessing and using knowledge to inform their work,
    e. The extent to which potential audiences relate to local, provincial, and national priorities for improving health programs and outcomes, and
    f. Any gender disparities in access to information.

2. Review what is already known
    a. A desk review regarding knowledge needs of target audience will be conducted to determine if the data and information needed already exist, before collecting new data.

3. Collect new data
   a. If information needed does not already exist, ZHI will collect original data, both quantitatively and qualitatively. The following methods for collecting data on knowledge needs will be considered:
      i. Environment scans
      ii. Interviews with key informants
      iii. Surveys
      iv. Focus group discussions
      v. Network Mapping (or Net-Map).

3.2. Knowledge Generation and Synthesis - To facilitate generation and synthesis of high impact knowledge to optimize ZHI programs and operations.

Knowledge management aims to create insights and new knowledge, as well as synthesize existing knowledge. Evidence-based guidance and program approaches will be synthesized and captured into user-friendly formats for program staff. These user-friendly formats include standard operational procedures (SOP) and job aids for program, M&E, and operations teams. ZHI uses these formats as follows:

3.2.1. Standard Operational Procedures

ZHI uses standard operational procedures developed internally as well as those developed by donors and other stakeholders. SOPs help to standardize programs and operations processes and serve as reference materials for staff. SOPs are distributed to all ZHI and sub-partner staff in print and electronic format. SOPs are living documents which are periodically reviewed to meet the ever-evolving program and staff needs.

3.2.2. Strategic Information and Evaluation

ZHI has robust Strategic Information and Evaluation (SIE) systems for each of its projects, and currently these are Accelerated, and Comprehensive HIV Care for Epidemic Control (ACCE) and DREAMS Reignite, Innovate, Sustain and Empower (RISE). Each of these systems are structured to allow data collection, capture in respective databases and access by program and SIE staff at district, provincial and national levels. The main databases are District Health Information Software (DHIS 2), with ACCE and DREAMS-RISE having separate instances. The DREAMS-RISE DHIS manages beneficiary-level data, and the ACCE DHIS manages largely aggregate data; DHIS 2 tracker is also used by ACCE for longitudinal tracking of sub-groups of clients including treatment defaulters and clients referred for treatment initiation.

ZHI SIE systems are evidence based, participatory and software automated, with a greater emphasis on learning and continuous quality improvement. Key performance indicator data are collected and analysed weekly, monthly, quarterly, biannually, and annually; these are packaged

into information products including slide decks and narrative reports which are shared internally with program teams and externally with sub-partners, government line ministries and donors. Figures 3 and 4 summarize data flow within the ACCE and DREAMS-RISE projects respectively.

Figure 3: ACCE program data flow
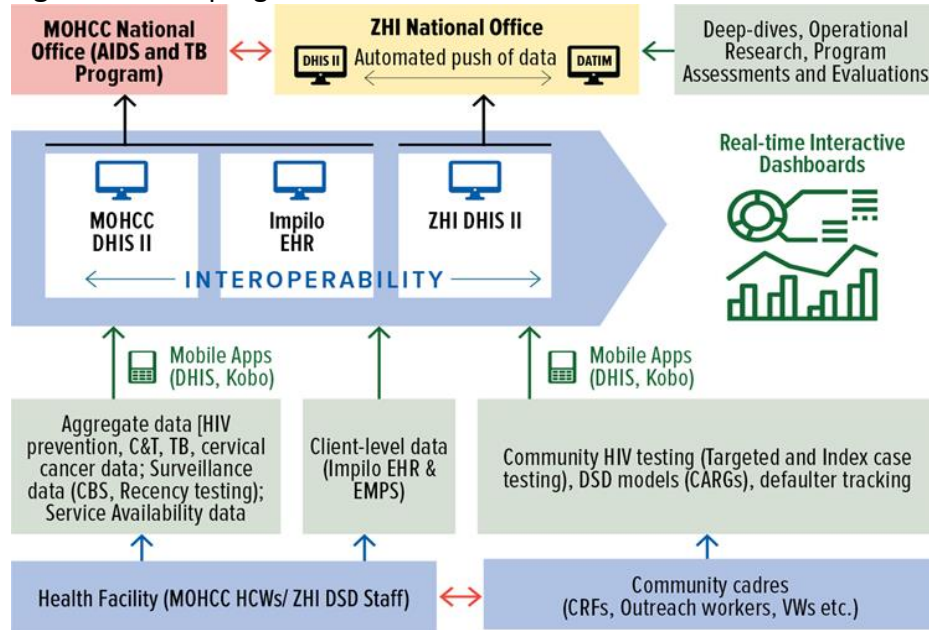
Figure 4: DREAMS-RISE program data flow
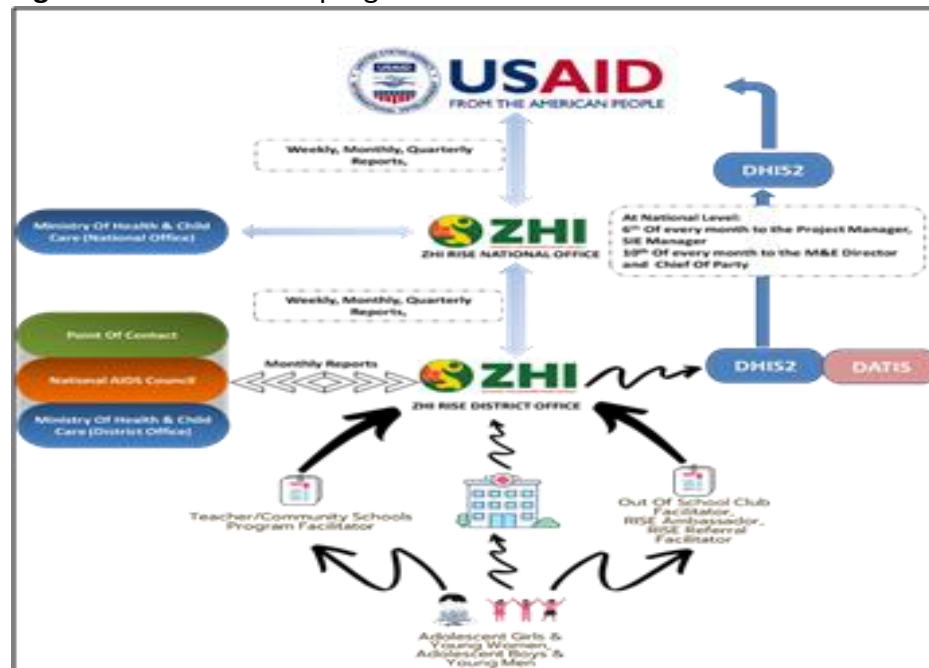
ZHI uses the interactive and dynamic Power BI dashboards, directly linked with program databases, to enable projects to keep track of progress in near-real-time for performance management and decision making. These dashboards are accessed by district, provincial and

national level project staff, and supervisors for real time program decision-making. ZHI employs collaboration, learning and adaptation (CLA) approach to generate, share, and use evidence that is critical for continuous program quality improvement. Some f the CLA activities include deep dives, operational research, program assessments and evaluations. Quantitative and qualitative data are collected to monitor progress and track outputs, outcomes, and impact. ZHI has an integrated management information system (IMIS) used to manage some of the operational activities including timesheets, booking of travel and procurement requests, leave booking among others. This web-based system can be accessed by all ZHI staff and allow efficient execution of operational activities which is critical for achievement of organizational objectives.

3.3. Knowledge Translation - To ensure effective translation of knowledge generated through ZHI programs and operations into language(s) and formats that target audience can grasp and apply.

ZHI generates substantial knowledge through research, program implementation and participation of its staff in policy formulation discussions. ZHI appreciates and places considerable value in translating such knowledge into a language and format that target audience including policymakers can readily grasp and apply. Knowledge translation is a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically sound application of knowledge[1]. Knowledge translation thus goes beyond disseminating e.g., of study findings and the isolated production of communication products such as policy briefs and working papers, to critically engaging with users of knowledge in different ways. ZHI uses the knowledge generation and translation cycle model (Figure 5), adapted from the Canadian Institute of Health Research (CIHR) knowledge-to-action cycle.

Figure 5: ZHI's knowledge generation and translation cycle

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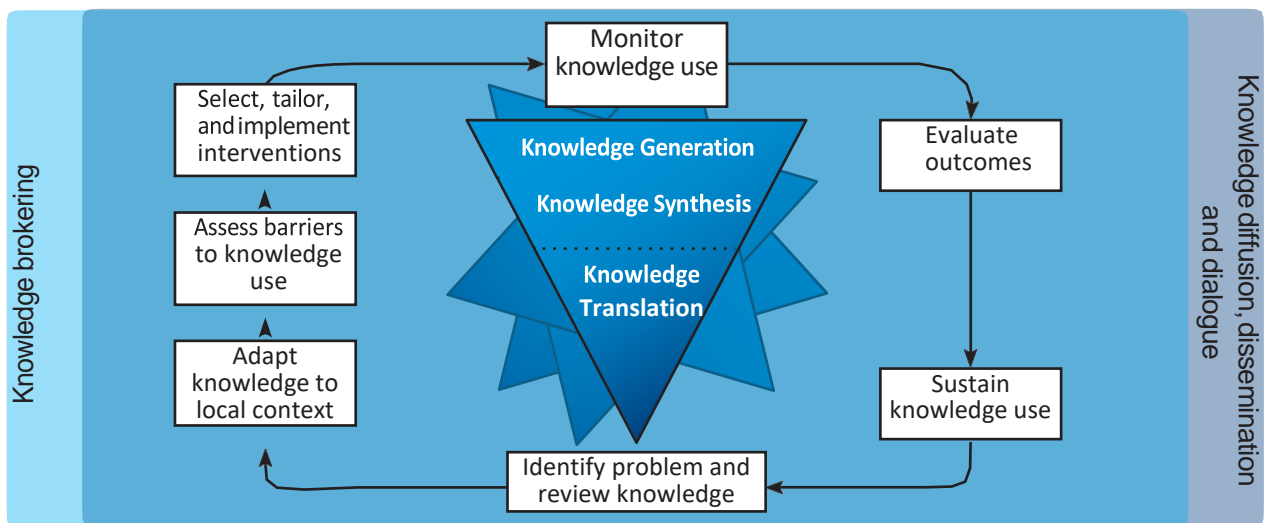
[1] The Canadian Institute of Health Research

The knowledge 'funnel' in the centre conveys the idea that knowledge needs to be distilled before it is ready for application. ZHI synthesises existing information to contextualise and integrate this within a larger body of knowledge. The processes in the action cycle surrounding the knowledge creation funnel reflect the importance of knowledge brokering and knowledge diffusion, dissemination, and dialogue, as well as M&E processes. Best practice findings also highlight the complex, iterative and dynamic nature of the interactions between knowledge generation, translation and brokering. These are interdependent activities with ongoing feedback loops. ZHI employs the following knowledge translations strategies:

3.3.1. Engagement of key stakeholders: ZHI engages key stakeholders about their views, knowledge gaps and priorities at the outset of each project to enhance translation of knowledge products to action.

3.3.2. Use of intermediaries: ZHI makes use of intermediaries including its internal communications team and the media to translate knowledge for different audiences. These intermediaries enable the suppliers of knowledge to interact iteratively with the users of such new knowledge and have an ability to interact with key research and policy actors, solve problems, facilitate learning, and innovate.

3.3.3. Use of Information Communication Technologies (ICT): ICTs play a key role in effective knowledge translation strategies within ZHI. Rather than trying to bring audiences into ZHI's own space, ICTs have enabled us to take our messages to target audiences. ICTs facilitate live streaming of public events such as launch of programs, round table meetings etc. ZHI target audiences no longer must visit the corporate website but can browse through their previously selected Really Simple Syndication (RSS) feeds.

3.4. Knowledge Capture and Organizing - To capture and organize knowledge in formats that facilitate smooth access and effective utilization for optimization of ZHI programs and operations.

Information can be generated through a variety of means, including publications, research papers, websites, meetings, and project experiences. Turning this information into knowledge requires identifying effective ways to utilize it. Smooth access and proper utilization of knowledge in many ways depends on how it has been captured and organized. ZHI will use several tools to capture and organize explicit knowledge gained from its HIV care and Treatment (ACCE) and DREAMS-RISE programs, and these include:

3.4.1. ZHI Website

ZHI maintains an updated website (https://www.zhi.co.zw/about-us/#), which stores and disseminates information. The key sections of the website include:

a) **A home page:** This has a welcome note outlining the organization's mission statement, outcomes it intends to achieve, success stories, blog posts and its partners.

b) **About us page:** This has an overview and brief history of the organization, geographical areas of current program implementation, board of trustees, and senior management team.

c) **Media page:** This has photos, videos, events, blog, social feed, and news.

d) **Programs page:** This has completed and current programs, as well as program impact. The impact feed has links to Strategic Information and Evaluation, Knowledge Management and Impact Analysis, Innovations and Outputs, Program Achievements and Impact, Research and Success Stories.

e) **Opportunities page:** This has employment opportunities within ZHI including fulltime, part time, internships, volunteers, and consultancy.

f) **Publications' page:** This has program reports and publications.

3.4.2 Shared Network Drive (SharePoint)

ZHI's management, program and operations staff have access to SharePoint (shared network drive), which stores and categorizes existing program and operations information. The system allows staff members to retrieve existing knowledge and share updated information across programs and the organization at large.

3.4.3. Program Assessment and Evaluation

ZHI employs a three-tiered program evaluation approach including a baseline assessment, midterm review, and final evaluation. Baseline assessment for the ACCE and DREAMS-RISE programs will be conducted in the first year of program implementation (FY 22), mid-term reviews (MTR) will be conducted in year 3 and final evaluations in year 5. The baseline will provide programs with benchmarks for key performance indicators (KPIs) and a point of reference to measure program achievements. MTRs will help clarify approaches, interventions and activities which are most effective, as well as identify important roles partners play in program implementation. Recommendations from MTRs will support course correction and ensure programs achieve their objectives.

3.4.4. Impact Evaluation

Impact evaluation studies are designed to focus on specific areas of learning. These studies take an in-depth approach at reviewing various themes and program areas. ZHI management facilitates organizational learning, allowing program teams to review successes and failures and sharing lessons learnt to improve performance and influencing others through advocacy.

3.4.5. Situational Analysis

ZHI captures ongoing activities and issue-based events in the form of reports and disseminates these to a wider audience through webinars, and round table meetings. The approach used for

disseminating information varies depending on the target audience. Discussions are held with a variety of stakeholders at the community, district, and provincial levels. In addition, national events including webinars and round table meetings are held where senior staff, government officials, and policy makers are updated. ZHI uses small-scale research and brainstorming sessions to glean and document innovative approaches and learning while exploring ways of enhancing program implementation. Through utilizing a diverse range of dissemination and consultation approaches, ZHI aims to solicit information from a range of sources which can be used to influence program design and contribute to the overall advocacy agenda of the program.

3.4.6. Human Interest Stories

Human interest stories are frequently collected within ZHI programs to capture the tangible impact of key program interventions on program beneficiaries. The human-interest stories are designed to present program beneficiaries and their problems, concerns, or achievements and describe how beneficiaries, with support from ZHI, are addressing such issues.

3.5.0 Knowledge Sharing - To develop and implement strategies that ensure effective knowledge sharing and dissemination within ZHI and its stakeholders.

Knowledge management fosters knowledge sharing and learning among specific individuals with common interests and goals. Knowledge sharing can occur in various formal and informal settings, and structured forums can enhance the positive outcome of the process. Knowledge sharing means valuing the tacit knowledge held by staff and partners. ZHI uses a variety of methods to share and disseminate lessons learnt from programs, including:

3.5.1. Staff Training

ZHI builds the capacity of its staff, sub-partners, and beneficiaries by cascading knowledge from the country office through provincial, district and down to beneficiary level. Objective of technical training is capacity building of staff on how to implement activities and achieve program goals. Technical trainings are conducted at both portfolio (organizational) and project levels. ZHI has also provided staff training on communications and knowledge management and will conduct refresher trainings as necessary.

3.5.2. Peer Learning

ZHI programs implementation present opportunities for learning, largely due to the diverse target population, wider geographical areas of coverage, and the implementation contextual diversities. ZHI has instituted and encourages peer-learning visits among program staff, service providers, and stakeholders relevant to program implementation. This south-to-south learning strengthens program implementation, facilitate achievement of targets, enhances scale-up of

best practices, and strengthens knowledge sharing on programmatic issues. The learning process occurs at different levels and is summarized in Table 3:

Table 3: ZHI Learning processes and levels

Beneficiary level	Cross-visits among targeted beneficiaries at the field level provides opportunities for participatory learning e.g., DREAMS beneficiaries learn viable economic strengthening activities / projects from their peers.
Staff level	At the district and provincial levels, technical and program staff routinely engage in cross visits designed to exchange ideas and share key innovations in program design and implementation. These cross visits have resulted in improvements in the quality of program implementation and replication of best practices into other program areas.
Management level	Senior program and technical managers routinely visit different project regions e.g., the ACCE and DREAMS-RISE provincial managers visit other provinces. These visits are designed to provide critical observations on the program and are used to adjust and adapt implementation as necessary. These visits help foster learning and are used to model optimal implementation practices.
Government level	ZHI is a member of various technical working groups in Zimbabwe and participates in program-specific coordination platforms at national, provincial and district levels. Coordination forums periodically meet and conduct joint planning and field implementation visits. Joint field visits findings are shared in forum meetings and with policy makers as necessary.

3.5.3. Bulletin

ZHI will produce a quarterly bulletin which will be shared with program staff, beneficiaries, government officials, donors, and relevant local and international non-Governmental Organizations (NGOs). Each bulletin will focus on key programmatic and operational knowledge management products, as well as key themes identified by program staff.

3.5.4. Learning Sharing Platforms

ZHI has various platforms accessed by staff that contribute to strategic decision-making and knowledge sharing. These platforms include senior management team, and project-specific technical team meetings. These platforms are composed of management, technical and field level staff, Table 4 summarizes key activities and deliverables for these platforms.

Table 4: Key activities and deliverables for ZHI learning platforms

Platform	Key activities and deliverables
Senior Management Team Meeting	This team includes national level managers and program leads and is responsible for providing direction and feedback on strategic issues, as well as sharing programmatic best practices. The SMT meets once every week, and team members share program implementation and operational updates; innovations to address key problems are identified and shared for continuous quality improvement.

Technical Team Meeting	Every week, project specific technical meetings are conducted, and participants are drawn from national, provincial and district staff. A review of program performance is conducted using weekly data for key performance indicators. Technical updates are shared with field staff, and capacity building on implementation approaches, monitoring and evaluation and operational processes is provided. Subnational teams present performance data against targets, promising innovations, and implementation challenges. This is a platform for peer learning across district teams. Feedback from field visits is shared, and action plans for addressing performance gaps are developed. This platform is important for providing a management forum for field staff to raise concerns and share ideas, and ensure senior managers remain connected with their district operations.
Monthly Technical Team Meetings	Monthly technical team meetings are held internally, as well as externally with funders and key stakeholders. These platforms provide an opportunity to review monthly program performance and share program updates among the technical staff. These meetings are designed to review progress towards reaching program strategic objective and identify gaps and issues. During these meetings, corrective action points are developed to address any concerns or shortfalls. Promising practices are shared, and these can be replicated in other districts. Findings from field visits are discussed, and sessions are held on critical areas including M&E, advocacy, as well as recommendations from any studies / evaluations.
All Staff Meetings	These are conducted monthly, involve all staff and meetings are chaired by the Executive Director. Project managers provide implementation updates, and other updates are provided including human resources, knowledge management, finance, administration, compliance, and resource mobilization. This is a platform for SMT to get feedback from all staff including those at implementation level. Important organizational and donor policies and regulations are shared during these meetings.

4.0. Ethical Considerations

ZHI will strive to foster ethical business practices in its operations, program implementation and as it generates and share knowledge. ZHI will ensure that human subjects are protected all times, in line with principles of "doing no harm". Written consent will be obtained from all program beneficiaries before photographs and videos are taken and used in ZHI knowledge products including success stories, conference abstracts, program briefs and manuscripts. All research including program assessments and evaluation will be conducted under ethics committee (Medical Research Council of Zimbabwe) approved protocols, including non-research determination protocol for analysis and use of routinely collected data. All staff participating in research will have valid ethics training/good clinical practice certificates.

5.0. Knowledge Management Risks and Mitigation Measures

ZHI recognizes that there are several risks associated with knowledge management including knowledge stealing, poorly structured knowledge repositories, poor quality knowledge, lack of end-user buy-in or usage, lack of proper maintenance of knowledge base, declining organizational creativity and innovation, poor management of user perception of the usefulness of knowledge management, cultural hindrances to knowledge transfer, organizational change and power shift, poor knowledge taxonomy and classification, risks related to cybercrime, social media risk, knowledge waste, knowledge outsourcing and espionage. Annexure 1 details the risks and measures ZHI uses for mitigation.

6.0. Budget and Workplan

An annual knowledge management work plan will be developed detailing broad and specific activities, deliverables and means of verification, responsible officer(s), funding source and implementation timelines. All activities will be costed, and a budget will be developed. This process will be tied with annual work planning and budget development for ACCE, DREAMS-RISE and other ZHI programs. Activity implementation will be tracked regularly through Knowledge Management unit meetings and burn rate will be tracked through monthly earned value analysis meetings.

7.0. Monitoring and Evaluating Plan

6.1. M&E Overview

It is important to monitor and evaluate the usefulness of applying KM to ZHI's work. Effective M&E relies on the relevance of questions asked, the quality of the data collected, the cogent analysis of the answers provided, and the ability to effectively communicate the meaning of results. While project data, reports, and evaluations are key information sources to strengthen programming, it is also critical to share the tacit knowledge that often explains key factors of successful programs. In an environment of communication and technological interconnectivity, including virtual social networks, the information abundance that we experience—both tacit and explicit— makes these basic monitoring and evaluation underpinnings critical.

Throughout the knowledge management process, needs assessment findings, program experience, research findings, and lessons learned will be fed back into inputs, processes, and outputs by program implementers, thus improving the development and delivery of KM activities. ZHI routinely monitors KM inputs, processes, and outputs, to quantify and describe what the programs have done, who has been reached, and who has applied knowledge. Annexure 2 details list of indicators for M&E of ZHI's knowledge management activities. Information from monitoring is also used to identify strengths and weaknesses and to make mid-term adjustments in program design and implementation. KM evaluation assist to explain why expected change did or did not occur and to identify both the contributors to progress and the challenges and obstacles to change. Taken together, these activities facilitate learning by

program staff before (needs assessment), during (monitoring), and after project implementation (evaluation).

6.2. Data Collection Methods

ZHI will use both quantitative and qualitative data to measure effectiveness of KM activities. Table 5 summarizes techniques that will be used to gather data.

Table 5: Data collection methods for knowledge management

Method	Description
Routine records	Administrative documents kept in storage for a set amount of time.
Web analytics	Software (e.g., Google Analytics, Web Trends) that tracks which pages website visitors view, the amount of time they spend on the site, resources downloaded, the geographic origin of users, and whether the visitor is new or returning.
Usability assessment	Examines how well users can learn or use a product by observing how they perform specific tasks. Participants are instructed to perform an activity on a computer or phone (in person or via virtual meeting spaces), and the interviewer documents how long it takes the participant to complete the task and any issues that came up. These assessments test the product, not the user.
Pop-up questionnaires	Short surveys that appear in a separate window on websites.
Bounce-back questionnaire	Questionnaires distributed inside print publications through postal mailing lists, consisting of both multiple choice and/or open-ended questions. Respondent either mail back the completed questionnaire or submit it online.
Surveys	Structured questionnaires that include close-ended and some open-ended questions. These are administered in person, over the telephone, or online.
In-depth interviews	Semi-structured interviews with open ended questions designed to elicit in-depth responses from participants. Interviews will be conducted in person or over the telephone.
Focus group discussions	Interview with a group of respondents and are administered in person.
Net mapping	An interviewer works with a group of stakeholders to discuss a topic or question and create a map of actors connected to the topic or question. The map specifies links among actors and the informant's perception of the amount of influence that each actor has.
Content analysis	Study of KM activity users' recorded speech and photographs on a specific topic. This method reveals communication trends and patterns and the attitudes and beliefs of individuals and groups.
Case studies	Study of an event and how and why it occurred, through interviews, participant observation, and records, to explore a specific topic or event.
Social network analysis	Study of discussions on a specific topic on Internet social media sites to determine how people connect, their views on issues, and trends in opinions over time.

8.0. Launch of knowledge management Plan

Launch of this knowledge management strategy will be conducted concurrently with launch of the ZHI strategic plan. Participants will be drawn from ZHI staff, GoZ line ministry representatives, NAC representatives, ZHI sub-partners, funding agencies and program beneficiaries.

Annexure 1: ZHI Knowledge Management Risks and Mitigation Measures

Risk	Potential Impact to ZHI	Controls in Place	Further Actions	Mitigation Actions
Knowledge Stealing - The risk of valuable intellectual property walking out of ZHI and into the hands of competitors. Employees may engage in unethical use of corporate knowledge bases for personal gain or purposes unrelated to the organization.	ZHI can lose business to competitors thereby jeopardizing survival of the organization.	All employees sign the confidentiality and non-disclosure agreement.	1) Develop/revise the organization's data protection policy 2) Restrict rights to access to classified information to ZHI's senior leadership; access rights for all other staff to be based on their position within the organization.	Establish a tracker that monitors and provides alerts to senior management on which employees are accessing KM products.
Poorly structured knowledge repositories - For a knowledge repository to be useful to ZHI, it must not only be able to store large volumes of information but also allow easy access and accurate retrieval on demand. Poor structure of the knowledge base usually results from careless categorisation of documents or poor choice of keywords attached to each document to assist its location.	A poorly designed knowledge repository can run the risk of employees losing trust in the knowledge base as a useful resource and may result in a boycott of the system, which translates into a knowledge management failure.	Information technology specialists support the creation, storage, organization, and transfer of knowledge.	Technical support infrastructure - Information technology will assist in the creation, storage, organization, and transfer of knowledge. Although the technology is not knowledge management, this is a necessary investment as it is a key enabler.	1) Regular review of the knowledge repository structure 2) Anonymous surveys with employees on the structure of KM repository 3) Regular statistical analysis of the usage data i.e., clicks and page visits.
Poor quality knowledge - Storage of documents on knowledge repositories that do not display an owner; the use of knowledge items with unknown origin is a risk. Knowledge shared in public repositories fails to capture the wealth of experience of the knowledge contributor and hence the context or tacit knowledge surrounding the knowledge item.	1) Depersonalised documents deny users the critical tacit part, rendering a knowledge item to be useless or invoke a very high risk if used. 2) Poor knowledge quality increases the risk of ZHI suffering severe damages from basing business	1) Knowledge management strategy development/review integrated in annual work planning for ZHI.	1) Develop and regular review of a knowledge management strategy - ZHI directs resources towards researching and capturing opportunities that are emerging in the marketplace. The strategy focuses on creating knowledge products that complement the emerging needs of the market; the	Existence of a comprehensive knowledge management strategy for ZHI.

	decisions on erroneous information out of the knowledge base. 3) Redundancy of knowledge contributes to unnecessary clutter in the system, and this can affect relevancy of search results. 4) Missing information in a knowledge base impacts the perception of quality as users will eventually develop a view that the system is not comprehensive enough to respond to their information requests.		strategy is forward looking and prepares the organization to compete in the new economy of knowledge-based business. 2) Regular review and archiving of outdated and non-used material.	
Lack of end-user buy-in or usage - A knowledge management system that is not accompanied by a scheme that motivates employees to want to use and contribute to the system is bound to fail. This buy-in is essential as there is a natural resistance to withhold knowledge.	Employees not motivated to contribute to and use knowledge base thereby resulting in suboptimal use of available knowledge for operational and programmatic decision making.	Regular updates of staff on employees contributing to knowledge base.	Introduced incentive schemes that reward employees with bonuses for contributing to the knowledge base.	Established a tracker that monitors employee contribution to knowledge base.
Lack of proper maintenance of knowledge base - Maintenance is a critical activity that serves to maintain the usefulness and quality of the knowledge base and avoid the risk of a knowledge base death spiral. In the operation of a knowledge repository, both useful and poor knowledge may be contributed. Large amounts of poor	Lack of trust in the knowledge management base/repository resulting in knowledge base death spiral. This results in ZHI relying on outdated/irrelevant knowledge for critical business decisions.	Restricted rights to upload materials to the knowledge repository to a few individuals.	1) Periodic review of employees with rights to upload products to the knowledge repository. 2) Established a committee of experts which reviews all knowledge materials before uploading into the knowledge repository; sub-optimal products are not uploaded.	1) Track number of knowledge products reviewed and uploaded in the knowledge base. 2) Track number of surveys conducted to get feedback from all staff.

knowledge in the knowledge base can severely slow down searches and make it difficult for users to locate the knowledge they are after.			3) Regular feedback from users to get their opinion of all facets of the knowledge base.	
Declining organizational creativity and innovation - One of the key benefits of a knowledge repository which accurately stores lessons learnt and past experiences is that it enables high re-use of knowledge and helps the organisation to avoid re-inventing the wheel when confronted with problems that are like those in the past. However, the ease of applying past knowledge makes the more difficult task of creating new solutions unattractive, essentially stifling innovation. Furthermore, the re-use of the strengths of past solutions without an attempt at also improving on past weaknesses will ultimately result in the past mistakes being repeated.	Heavy reliance on experience and lessons learnt without due consideration of past mistakes will stifle innovation and may result in mistakes being repeated.	Knowledge management process planning incorporated in the annual review and planning activities.	Knowledge-based process planning - ZHI remaps key processes in the organization with a focus on what information is required at each main step; this improves the awareness of what information is required and will increase the use of existing corporate knowledge. Innovations are incorporated in the planning process.	Knowledge management strategy reviewed and updated annually, or whenever there are major shifts in program focus.
Poor management of user perception of the usefulness of knowledge management - It is critical for ZHI management to deal with the fragile confidence of sceptical employees in the organization towards the knowledge management concept. It is a significant risk to go ahead with an initial large-scale system and have this system fail publicly – essentially resulting in a loss of confidence in the knowledge management concept.	Loss of confidence in the knowledge management concept.	Knowledge management initiatives piloted on a micro-level before scaling up.	Roll out a series of small knowledge management pilot initiatives and experiments. These are likely to fail quickly, but gracefully out of sight of the entire organization, providing, in a sense, damage control. Hence, by avoiding large investments and perhaps large failures, ZHI management can protect the knowledge	Close monitoring (quarterly) of success of knowledge management initiatives.

			management concept from a loss of credibility.	
Organizational change and power shift - With advances in networking technology and the internet, virtual global communities have been formed. These communities of practice aim to maximize individual and collective learning as well as collaboration by providing access to experts, knowledge, and other work colleagues globally. Within these communities, status is derived from an individual's level of expertise and depth of participation and not according to hierarchal rank. The benefits from utilizing the efficiency and innovative ideas from this global network and an apparent convergence to project teams that span the globe is placing tremendous pressure on the traditional organizational structure and hierarchy.	Status within an organization is derived from an individual's level of expertise and depth of participation and not according to hierarchal rank; this can bring confusion and disharmony within the organization.	Knowledge management strategy is one of the critical ZHI strategic documents.	Knowledge stewardship - The task of organizing ZHI's knowledge and working out means of distributing it electronically are mission critical to knowledge management. ZHI developed knowledge taxonomies and knowledge delivery systems that do not disrupt the organization's hierarchy /reporting structure.	Ensure reporting structure is shared with all staff, and updates are shared as and when any changes are instituted.
Cultural hindrances to knowledge transfer – Knowledge management may be reduced merely to just management of information if there is no knowledge sharing or transfer. Therefore, cultural issues represent significant risks to the success or failure of a knowledge management system. Examples of cultural hurdles include lack of trust; different cultures, vocabularies, and frames of reference; lack of time and meeting places: narrow idea of	Knowledge sharing is critical to the success of knowledge management and is also very difficult to establish. ZHI will not derive maximum benefits from knowledge if it is not systematically shared across the organization.	Regular departmental meetings to update staff on available knowledge, how to access and use that knowledge to improve program and operational efficiencies.	1) Establishing a community of practice that enables employees to share productivity-enhancing practices, new techniques and lessons learnt. 2) Use of a portal software that integrates a variety of applications including email, e-business intelligence, workflow, e-learning to enable end users to have the value add of a one-	1) Track number of staff meetings conducted. 2) Establish an integrated management information system / knowledge repository which requires single log-in credentials.

			point report that combines information from a variety of sources without the traditional overhead of visiting and logging onto each system individually.	
productive work; status and rewards go to knowledge owners; lack of absorptive capacity in recipients; belief that knowledge is a prerogative of certain groups, not-invented-here syndrome; and intolerance for mistakes and need for help.				
Poor Knowledge Taxonomy and Classification - A knowledge taxonomy is critical to allow information to be located accurately through search engines. If knowledge cannot be tracked effectively, there would be no point in storing knowledge. Most knowledge is often unstructured, and without proper classification and indexing schemes, staff will not be able access knowledge efficiently.	Suboptimal use of available knowledge products for programmatic and operational decision making.	Draft knowledge taxonomy.	1) Review/update taxonomy with categories of information that assist users to narrow down the section of the knowledge base to search. 2) Establish a thesaurus containing synonyms of search teams to allow information to be retrieved using words like the key words associated with the document targeted.	Checklist outlining all critical knowledge management support documents developed and used annually.
Risks related to cybercrime - Cybercrime refers to criminal activities carried out by means of computers or the Internet. Risks related to cybercrime relate to the threats of malicious software either destroying or locking computer systems. By opening an email or its appendix, the victim initiates the software which for example encrypts his/her data, locks them out of their systems and demands ransoms. Such software may spread very quickly, and all the organization's computers might be affected within a moment.	This is a serious risk, especially for ZHI as it handles and stores fragile and sensitive client data and base its operations on computer-stored knowledge.	Password-controlled access to all ZHI databases/Information management systems.	1) Conduct a full risk assessment to identify what data cyber criminals might be interested in e.g., private client data, the loss of which may open ZHI up to fines, lawsuits, and a collapse in trust in ZHI's customer base. 2) Establish a system to track down where ZHI's data are stored and who has access to it, including employees using personal laptops and phones on the business network. 3) Assess vulnerabilities in ZHI's	1) Track personal computer and mobile devices connected to the ZHI business network.

			network security system; engage specialists who can carry out intrusion detection and prevention system examinations.	
Social media risk - social media are characterized by easy searching, open participation, a minimal publishing threshold, dialogue, community networking, and the rapid and broad spread of information and other content via a wide range of feedback and linking systems. The underlying notion of social media to encourage information sharing and joint knowledge creation (user-generated content) also support the dissemination of fake news and alternative facts.	Apart from providing many positive impacts on ZHI, social media also possess the danger of bringing several unplanned/ undesired consequences e.g., spread of fake information or the existence of fake social-media accounts that troll company's operations thereby increasing chances of business failure.	Management of ZHI website, its content and social media accounts is restricted to a few senior staff members.	Restrict management of ZHI website and its social media accounts to a few senior staff members.	Regular (quarterly) monitoring of number of officers managing the ZHI website and social media accounts.
Knowledge Waste - this can be defined as not making use of available and potentially useful knowledge, and can result in a continued process of reinvention, which can involve a risk that issues that were already done right cannot easily be replicated/reinvented and thus, the organization may lose (or unlearn) certain strengths over time. At the organizational level, valuable resources are wasted e.g., human work, financial investments, etc., as the knowledge that is available is not being used.	Issues that were previously done right cannot easily be replicated hence ZHI may lose (or unlearn) certain strengths over time.	A repository with lessons learnt during program and operational activity implementation exists.	Continuous engagement of staff on available knowledge and the usefulness of this knowledge in improving operational and program activity implementation.	Quarterly staff meetings focusing on knowledge management.

Knowledge Outsourcing - This is the transfer of a business activity or function from ZHI to an external contractor who takes control of the activity's inputs and then performs that function, selling it back to the organization.	Outsourcing of business activities/functions involves several knowledge risks such as a risk of losing skills and capacities that are needed to perform central (knowledge) processes, as well as knowledge stealing.	Procurement of consultancy limited to competencies not available within ZHI.	Limit procurement of consultancy to expertise not available within ZHI.	Monitor number of consultancies procured in a fiscal year for both technical and operational activities.
Espionage - This is the practice of spying or using spies to obtain information about the plans and activities especially of a competing organization. Industrial espionage is essentially a sort of commercial intelligence gathering, often by industry competitors. In the era of global competition, organizations are forced to gather information about their competitors, their products, and activities. However, there is a point when industrial espionage becomes an unethical practice.	Consequences of espionage are severe to ZHI, not only about financial aspects but also other areas of the organization's operations. Espionage actions often cause the introduction of highly controlling security measures and intensive employee monitoring; all this brings distrust to the organization. Therefore, espionage is linked not only to knowledge loss but also to the loss of open culture, based on knowledge exchange and trust.	All employees sign the confidentiality and non-disclosure agreement.	Monitor private computers and mobile devices on the ZHI network.	Establish a system to track private computers and mobile devises on the ZHI network.

Annexure 2: Indicators for M&E of ZHI's Knowledge Management

A. Process Indicators	
Knowledge Assessment	
1	Organizational knowledge assessment conducted in the last five years.
2	Number of instances where health knowledge needs assessments among intended users are conducted.
3	Number and type of user feedback mechanism(s) on knowledge needs used.
4	Users' knowledge needs/feedback used to inform design and implementation of products and services.
Knowledge Generation, Capture and Synthesis	
5	Number of key actionable findings, experiences and lessons learned captured, evaluated, synthesized, and packaged.
6	Number of new KM outputs created and available, by type.
7	Number of KM outputs updated or modified, by type.
Knowledge Sharing	
8	Number of KM collaborating activities, by type.
9	Number of training sessions, workshops, or conferences conducted, by type.
Strengthening of KM culture and capacity	
10	Number/percentage of KM trainings achieving training objectives.
11	Number of instances of staff reporting their KM capacities improved, by type.
12	Number of KM approaches/methods/tools used, by type.
B. Outputs – Reach and Engagement Indicators	
Primary Dissemination	
13	Number of individuals served by a KM output, by type.
14	Number of copies or instances of a KM output initially distributed to existing lists, by type.
15	Number of delivery mediums used to disseminate content, by type.
Secondary Dissemination	
16	Number of times a KM output is reprinted/reproduced/replicated by recipients.
17	Number of file downloads.
18	Number of page views.
19	Number of page visits.
Referrals and Exchange	
20	Number of links to Web products from other websites.
21	Number of people who made a comment or contribution.
Outputs – Usefulness Indicators	
User Satisfaction	
22	Number/percentage of intended users receiving a KM output that read or browsed it.
23	Number/percentage of intended users who are satisfied with a KM output.
24	User rating of usability of KM output.
25	User rating of content of KM output and its relevance.
26	Number/percentage of intended users who recommend a KM output to a colleague.
Quality	
27	Average page views per website visit.
28	Average duration of website visits.
29	Number of citations of a journal article or other KM publication.

30	Number/percentage of intended users adapting a KM output.
31	Number/percentage of intended users translating a KM output.
	Initial Outcome Indicators
	Learning (awareness, attitude, intention)
32	Number/percent of intended users who report a KM output provided new knowledge.
33	Number/percentage of intended users who report a KM output reinforced or validated existing knowledge.
34	Number/percentage of intended users who can recall correct information about knowledge/innovation.
35	Number/percentage of intended users who are confident in using knowledge/innovation.
36	Number/percentage of intended users who report that information/knowledge from a KM output changed/reinforced their views, opinions, or beliefs.
37	Number/percentage of intended users who intend to use information and knowledge gained from a KM output.
	Action (decision-making, policy, practice)
38	Number/percentage of intended users applying knowledge/innovation to make decisions (organizational or personal).
39	Number/percentage of intended users applying knowledge/innovation to improve practice (in program, service delivery, training, and research).
40	Number/percentage of intended users applying knowledge/innovation to inform policy.