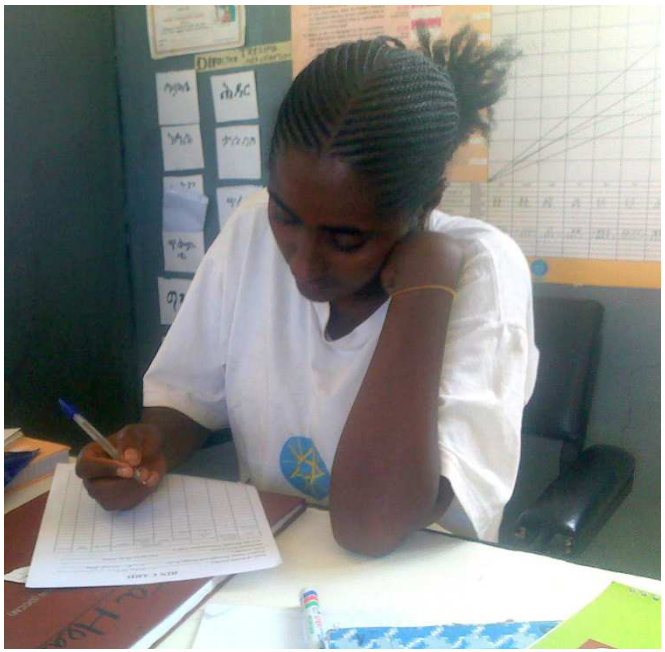
Supply Chains 4 Community Case Management



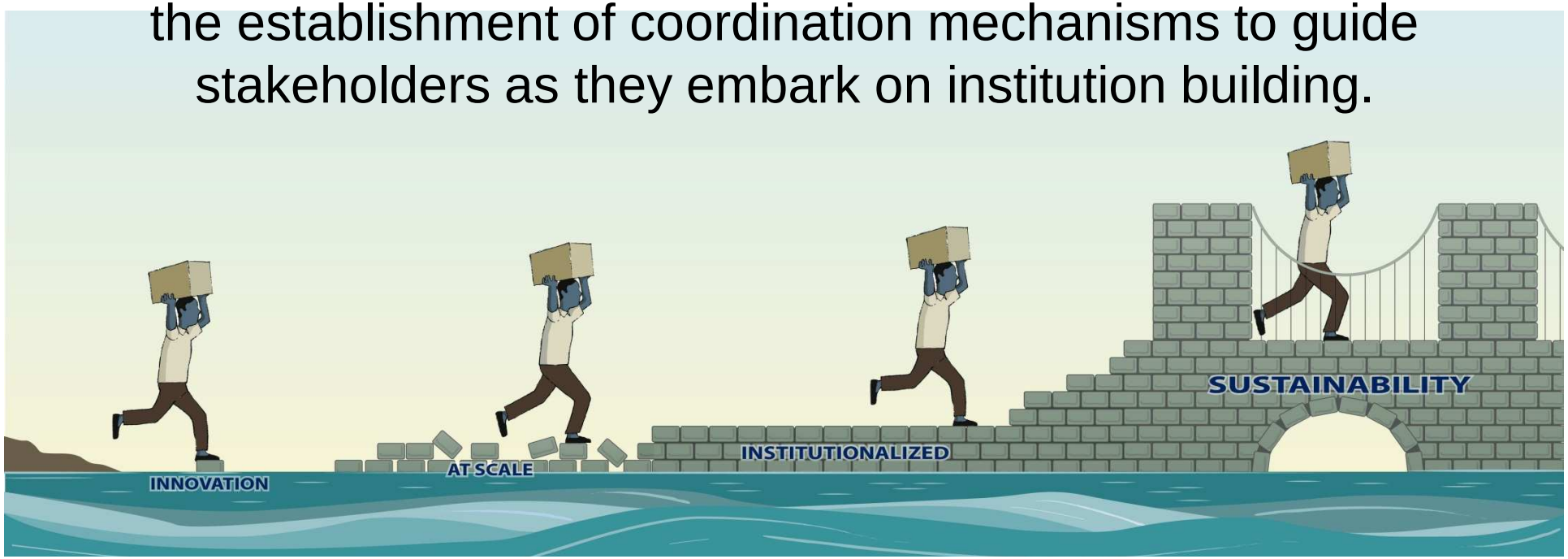
IPLS for HEWs Training Midline Assessment

October - December 2012
Ethiopia

JSI Research & Training Institute, Inc.

SC4CCM Project

SC4CCM is a learning project that identifies proven, simple, affordable solutions that address unique supply chain challenges faced by CHWs. The project seeks to foster a sustainable approach to scale up and to ensure that MOH can own and adapt successful models to strengthen community supply chain practice. This will be achieved through facilitating the establishment of coordination mechanisms to guide stakeholders as they embark on institution building.



Background

SC4CCM baseline assessment of HP supply chain in 2010

- Implementation of IPLS to HCs just starting, but plan for IPLS training for HEWs not finalized
- Cotrimoxazole and zinc slowly integrated into HP supply chain via training and starter kits in 2011-2012
- Introduction of PHCU in 2012 – change to supervision structure and introduction of mandatory monthly meetings
  - Opportunity for supply chain training since SC identified as one of priority areas

Baseline Assessment (2010)

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- Very low levels of availability of CCM commodities at HPs
  - only 20-40% of HPs had all CCM products needed (ORS, RUTF and any ACT) in stock on DOV
- Lack of basic SCM knowledge and skills among HEWs, and supervisors
  - 11% of HEWs and 8% of HC staff received SC training
  - 8% of HEWs and 11% of HC had SOP manuals available
  - 14% of HEWs reported using stock-keeping records
- Inadequate storage conditions, shelves in short supply
- 66% of HEWs reported lack of transport as a major constraint for collecting products, especially bulky and heavy ones
  - Most HEWs spent 1-3 hours travelling on foot to HCs to collect products
- High levels of supervision reported, but did not results in SC procedures being implemented, and only 2% of HEWs reported supervision as a source of motivation

Two-phased Intervention Strategy

- Phase 1: Provide maximum coverage of SC knowledge, skills and tools amongst HEWs to ensure basic processes and competencies, and contribute to *incremental* improvements in product availability

- Phase 2: Build on the foundation by working on strengthening the IPLS pull system to *significantly* improve product availability

IPLS for HEWs Training Approaches

- PFSA in collaboration with USAID | DELIVER and SC4CCM Projects designed a training approach for HEWs.
- Objective was to design a SCM training for HEWs that was **affordable**, **practical**, **scalable** and **effective** in providing SC “basics” to maximize the number of HEWs trained.
- Two different approaches were identified that used existing activities as opportunities to impart SC knowledge and skills.
- The TWO approaches are
  1) Group training approach at the monthly PHCU meeting
  2) OJT during resupply and supportive supervision

Two Approaches, Three Arms

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Group Training with Problem Solving (SC4CCM)

1. Intensive –
   - group training as part of PHCU monthly meeting
   - ½ day orientation for Woreda and PHCU director
   - supportive supervision to HC and HP
2. Non-intensive –
   - group training as part of PHCU monthly meeting
   - ½ day orientation for Woreda and PHCU director

On the Job Training (USAID | DELIVER Project)

3. OJT
   - OJTat HC or HP
   - supportive supervision to HC and HP

Midline Evaluation Goal & Objectives

Goal

Determine which of the 3 methods achieves the best balance between achieving competencies, affordability and ease of scale up

Objectives

- Measure competencies (3 areas)
- Determine potential of scale up
- Look at changes in product availability across 3 groups
- Verify zonal coverage of basic supply chain (SC) training
- Produce data to advocate for further scale up of best training method nationwide
- Potentially identify areas for further intervention

Methodology

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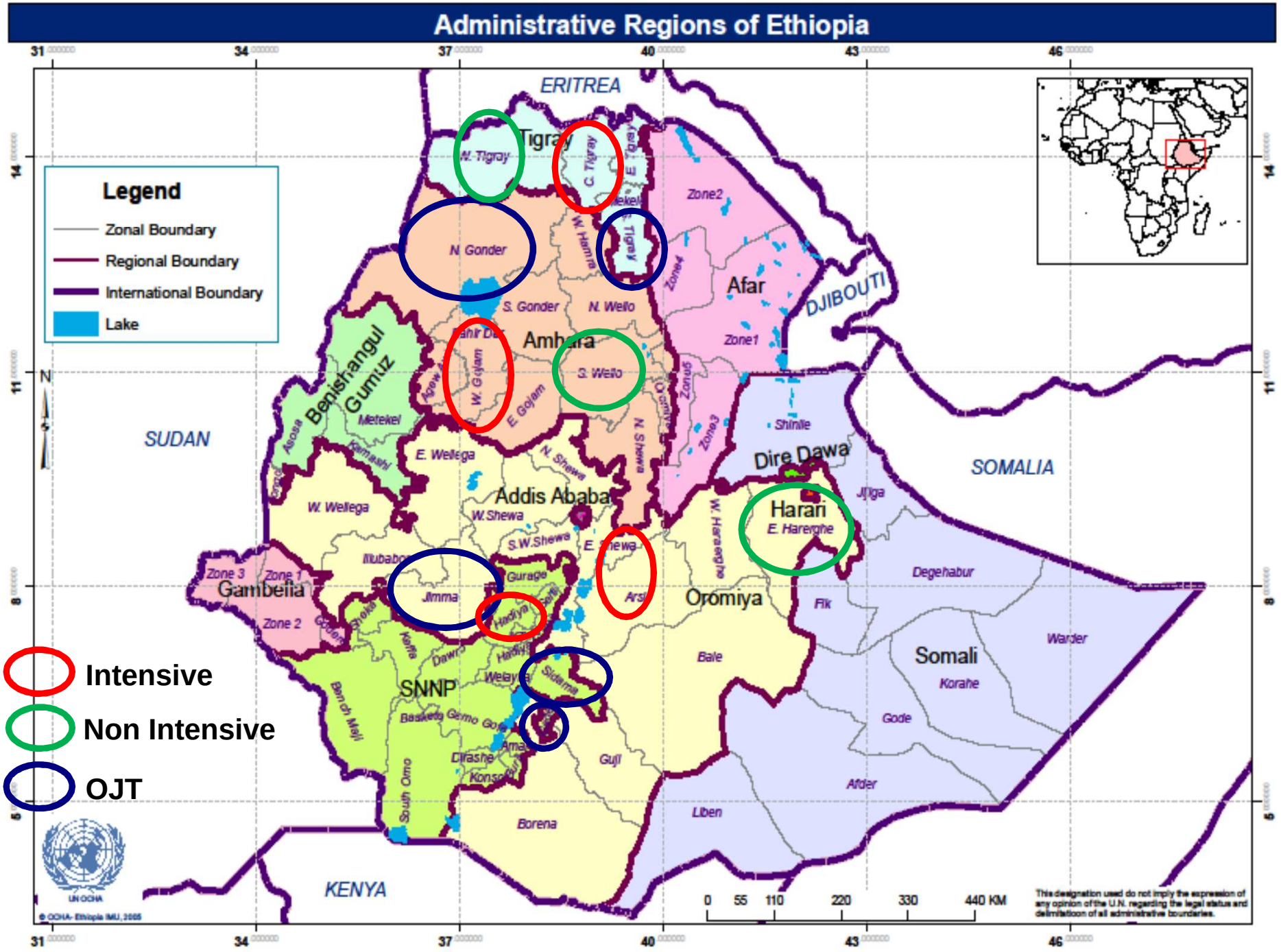
Both qualitative and quantitative methods were used:

- Logistics Indicators Assessment Tool (LIAT) was the main quantitative tool
  - Data was collected using mobile phones
  - Partner with local evaluation group JaRco
  - Collected stock data for 14 tracer commodities
- Focus group discussions
- Competency questionnaire - HEWs completed tests on:
  - Starting bin card for a new product
  - Completing bin card
  - Completing HPMRR
  - Storing health products

Sampling: Phase 1

`	Intensive	Non-Intensive	OJT	Total
RHB	Amhara, Oromia, SNNP, Tigray	Amhara, Oromia, SNNP, Tigray	Amhara, Oromia, SNNP, Tigray	**4**
ZHO	W Gojam, WArsi, Hadiya, CTigray	S.Wollo, E.Hararge, Gedio, NW Tigray	N.Gondar, Jimma, Sidama, S.Tigray	**12**
WHO	8	10	10	**28**
HC	24	30	28	**82**
Health Posts	80	92	91	**263**


Administrative Regions of Ethiopia
ERITREA
SUDAN
KENYA
SOMALIA
DJIBOUTI
Tigray
Afar
Amhara
Oromiya
Somali
Benishangul Gumuz
Gambella
SNNP
Dire Dawa
Harari
Addis Ababa
Legend
Zonal Boundary
Regional Boundary
International Boundary
Lake
Intensive
Non Intensive
OJT
0 55 110 220 330 440 KM

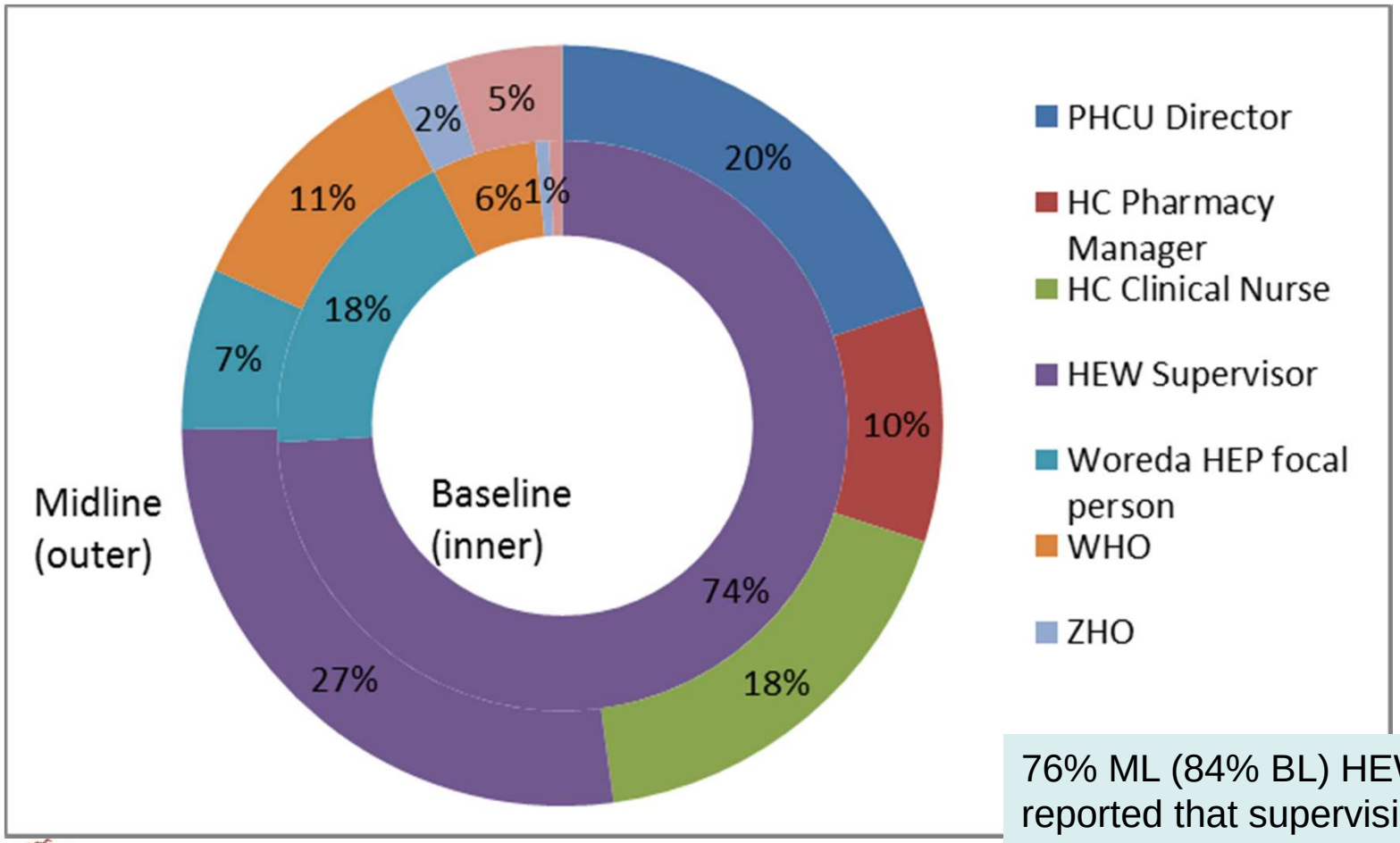
Limitations

- Predictable challenges associated with multi-lingual survey
  - Three languages (Amharic, Oromiffa, Tigrinya)
- Some health posts/centers were not accessible; replacements when possible
- Missing/incomplete data for some forms
- Majority of HC staff in OJT arm not trained, limiting sample size and possibilities for comparison
- Minimal differences in training implementation across the three arms

Relevant Contextual Results

- Systematic implementation of HC as resupply point as per IPLS design:
  - 95% of HPs are resupplied primarily from HCs (vs. 66% at BL)
- 70% of HC staff sampled were formally trained in IPLS
- 54% of HEWs sampled were trained in IPLS for HEWs
- Monthly meetings not consistently operationalized across all PHCUs
  - 56% of HC staff report PHCU meetings held every month (79% in the intensive group)

Contextual Results: Change in Supervision Structure



76% ML (84% BL) HEWs reported that supervision happens at least every month

Results: Coverage of Training & Tools

- Design & implementation of interventions by arm
- Training coverage
- Training settings
- Tool availability
- How much and what kind of problem solving by arm
- Reported supervision by SC topic

Intensive: Design

- 3 day TOT for Health Center Pharmacy/Store Managers
- ½ day orientation for Woreda and PHCU director
- Joint supportive supervision with WoHO staff to HCs, HPs
  - 1-3 visits per HC (3 rounds), including visits to some HPs
  - Use of supportive supervision checklists, jointly developed plans for HC follow up activities
  - Technical support on IPLS for HEWs and PS to HC pharmacy/store managers and PHCU directors
  - Supervision visit updates/feedback to woreda, ZHD and RHBs
- One round of review meetings per region conducted with participants from RHB, PFSA, ZHD, WoHO, HC and HEWs

Intensive: Implementation

TOT Target: 482 HC staff; rollout period Jan - Jul

Jan - Mar

84% (404)
HC TOTs complete

Apr

10% (46)
HC TOTs complete

Jul - Aug

Oct-Dec

LQAS Monitoring Results (Intensive)
100% of HC TOTs (n=37)
91% of HPs trained in IPLS 1 (n=37)

SMS survey results (ALL ARMS)
88% of HCs who trained HEWs on IPLS 3 and higher (Response rate=38%)

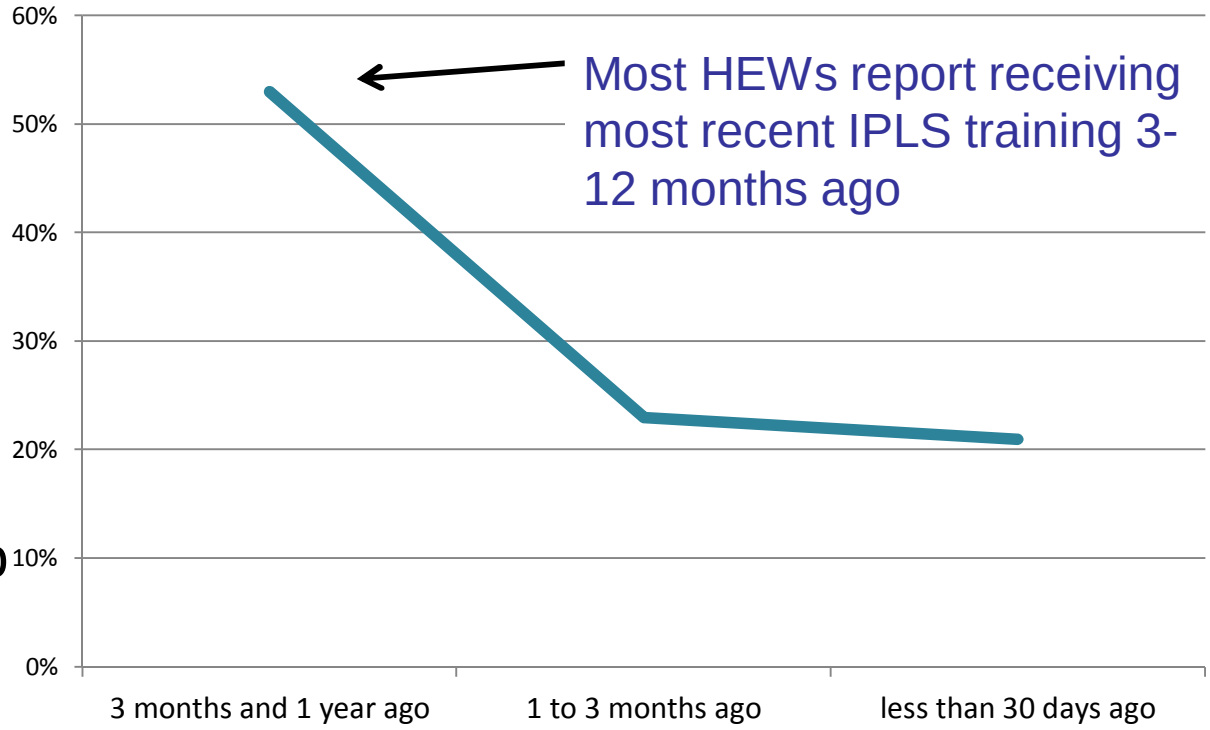
Midline

62% HCs report receiving **SC4CCM IPLS for HEWs** (TOT) training

84% of HEWs report receiving IPLS training

Intensive: When & How Trained

- 76% HEWs report receiving most recent IPLS training during monthly HC meeting



- For learning how to complete forms, reports:
  - 49% HEWs report during a **monthly meeting**
  - 42% during a **workshop**
  - 36% from supervisor/**OJT**

Reported variation in delivery settings and methods; training not always implemented as designed

Intensive FGDs: How Trained

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Amhara, the IPLS trainings were provided in two different settings:

1. One of the cluster health centers provided the training for 2 full days
2. Remainder of HCs trained for 2 hours in conjunction with each monthly review meeting

SNNPR, the IPLS training was given in two different settings:

1. One was given at the woreda level
2. Another was given at each cluster health center for one day each month

Oromiya, IPLS training was provided in different ways:

1. Most HEWs were trained in the cluster health center
2. A few were trained in the woreda health office
3. One was trained in her health post

Responses reflect varied approaches in how group training was conducted

Intensive: Availability of Tools

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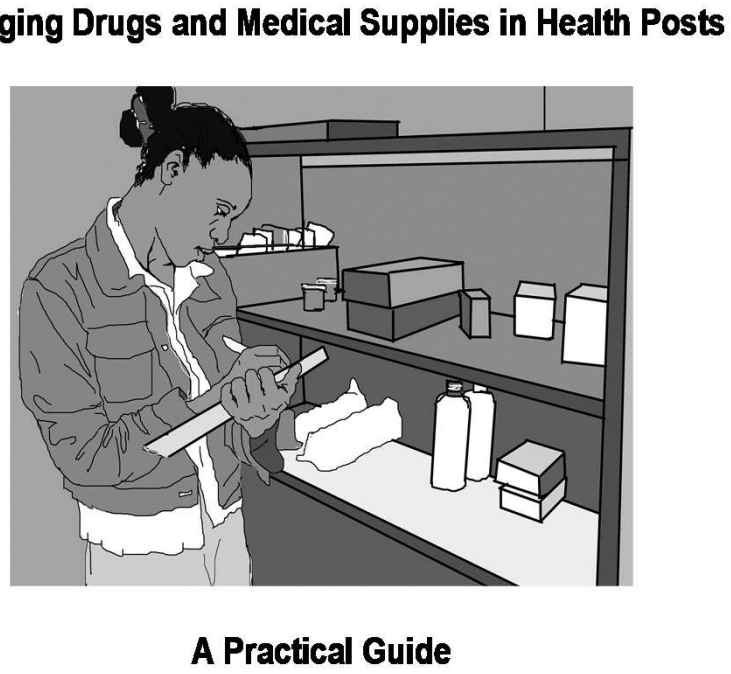
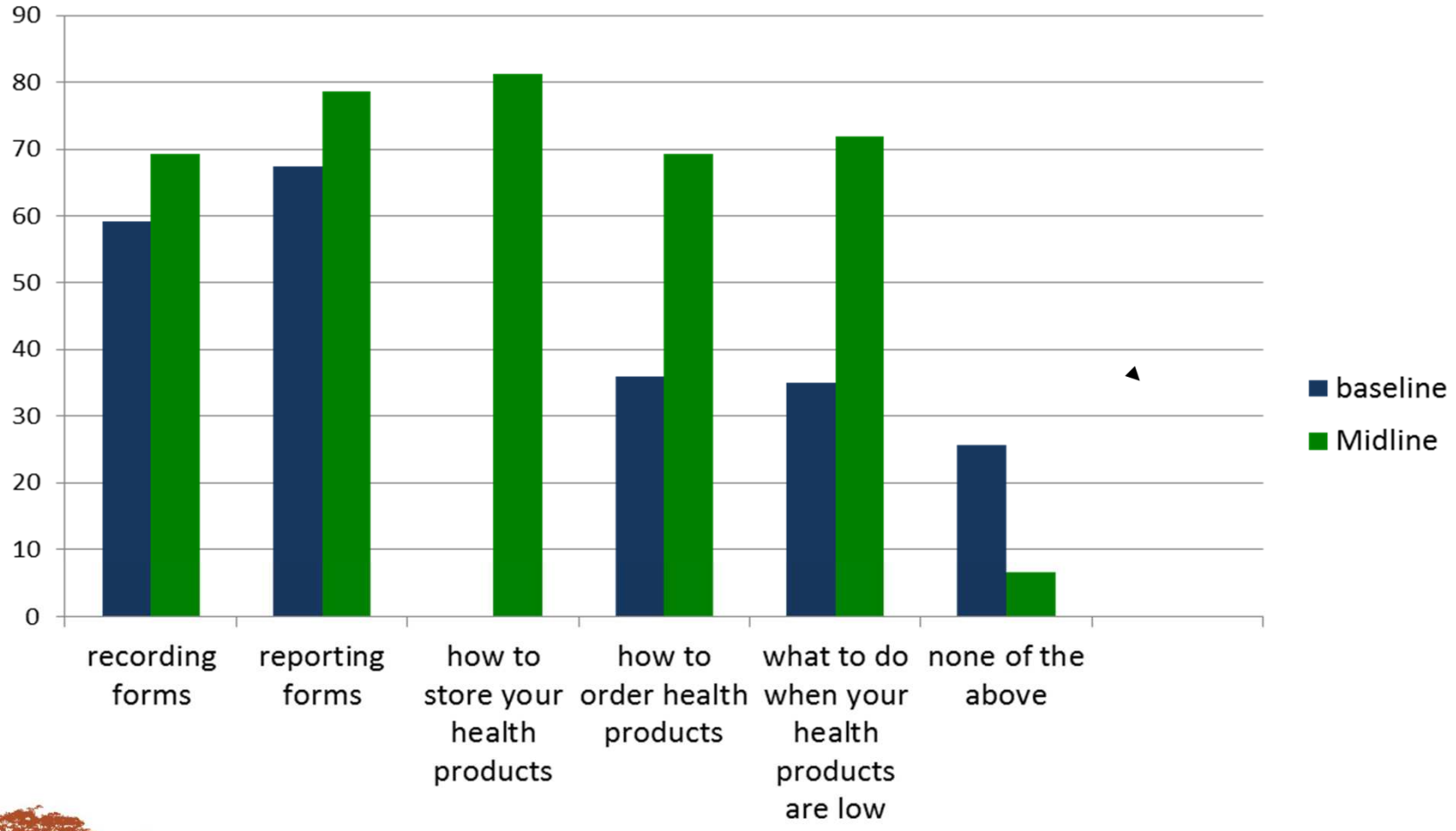
- **%** of **HEWs trained** in IPLS that have the tools they need:
  - 72% have flipbook
  - 95% have blank HPMRR available
  - Bin card availability varied by product, but generally **half or more of HEWs** who managed a product had a bin card for each item
    - ~80% availability for cotri, zinc and ~18% for ACTs



Intensive: Reported Supervision Topics



Intensive FGDs: Likes and Dislikes

LIKES

- "I have never had such an **organized** training. There were enough tools for **hands-on** practice and the materials and training room were also made ready before the training. The trainer including the training room was organized and ready to teach us when we arrived" (Sorro, I)
- "The training was very **practical.** We used our own examples to practice on the different tools such as BIN cards, and HPMRR. We discussed how a model shelf can be prepared from local wooden material." (Yilmana Densa, I)

DISLIKES

- "The **time allocated** for the training was **not adequate**. It is a three day course but we were trained only for a day." (Sorro, I)

Non-Intensive: Design

- 3 day TOT for Health Center Pharmacy/Store Managers
- ½ day orientation for Woreda and PHCU director

No follow up or supervision after initial training

Non Intensive: Implementation

TOT Target: 505 HC staff; rollout period Jan - Jul

2012

Jan - Mar

78% (395) HC TOTs complete

April

18% (92) HC TOTs complete

Jul - Aug

8% (40) HC TOTs complete

Oct-Dec

LQAS Monitoring Results (Intensive)
68% of HC TOTs (n=33)
49% of HPs trained in IPLS 1 (n=33)

SMS survey results (all arms)
88% of HCs who trained HEWs on IPLS 3 and higher (Response rate=38%)

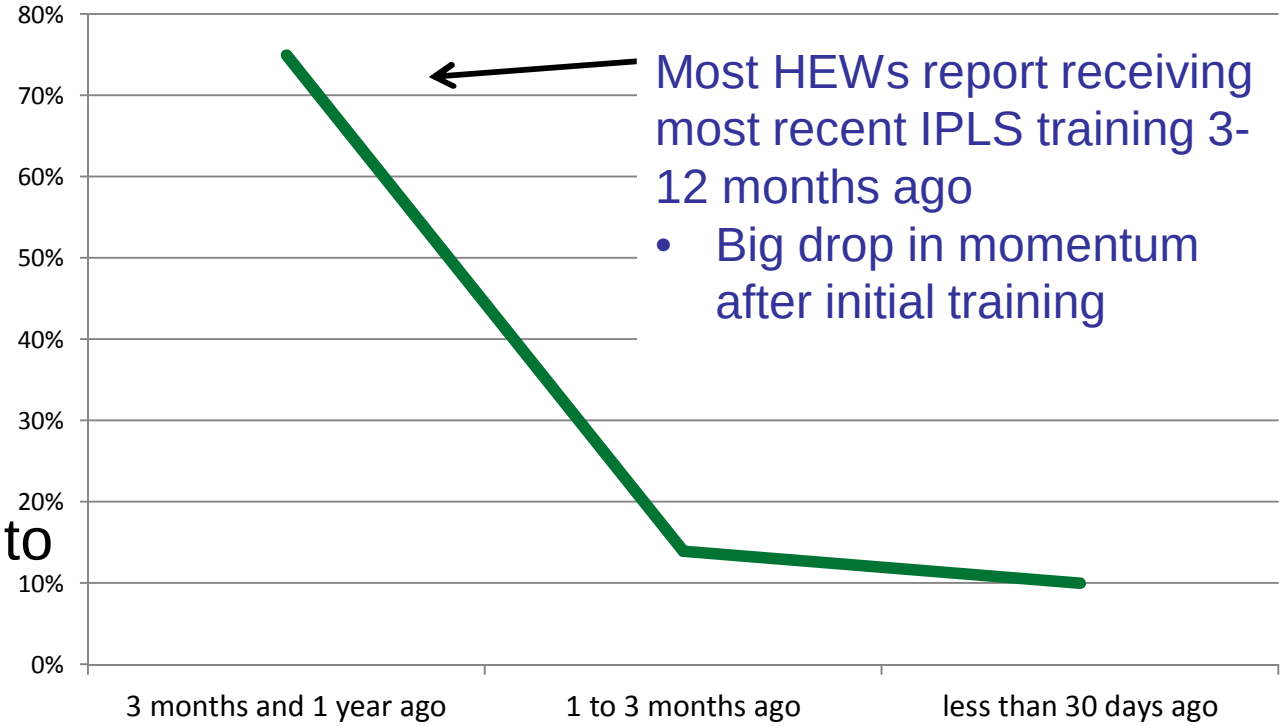
Midline

70% HCs report receiving **SC4CCM IPLS for HEWs** (TOT) training

62% of HEWs report receiving IPLS training

Non Intensive: When & How Trained

- 43% HEWs report receiving most recent IPLS training during monthly HC meeting



- For learning how to complete forms, reports:
  - 48% HEWs report during a **monthly meeting**
  - 19% during a **workshop**
  - 39% from supervisor**/OJT**

Reported variation in delivery settings and methods; training not always implemented as designed

Non Intensive FGDs: How Trained

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Amhara, IPLS orientation was provided after the monthly PHCU meeting

SNNPR, the IPLS training was provided in two different settings:

1. One was given at the woreda level in April 2012 as part of another meeting and was more like an orientation, lasting less than 30 minutes which most of the HEWs attended.
2. Second was provided at cluster health centers primarily on IPLS and lasted for half a day and was only given to selected health posts.

Oromiya, the training was appended to the end of another training.

Responses reflect varied approaches in how group training was conducted

Non Intensive: Availability of Tools

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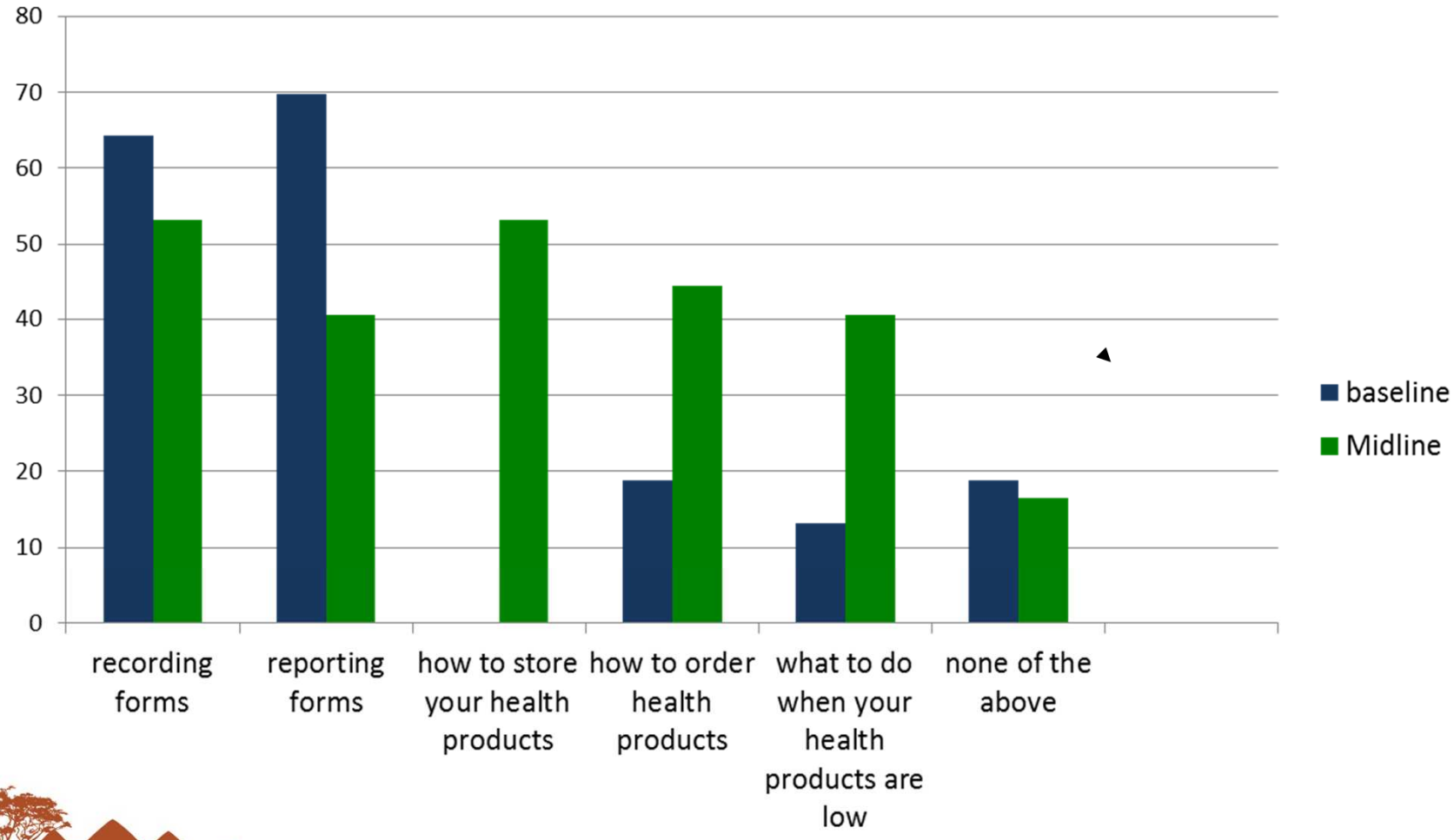
- % of **HEWs trained** in IPLS that have the tools they need:
  - 61% have flipbook
  - 70% have blank HPMRR available
  - Bin card availability varied by product, but generally only **one third of HEWs** managing a product had a bin card for each item
    - 60% availability for zinc, 47% for DMPA and ~12% for ACTs

Non Intensive: Reported Supervision Topics



Non-Intensive FGDs: Likes and Dislikes

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LIKES

- "We liked the **interactive nature** of the training as we were able to practice how to fill the formats and how to apply the First Expired First Out (FEFO) system which enabled us to understand proper stock management; we also liked the guideline provided during the training (E. Hararge, NI)
- "The training was full of **practical** information as opposed to other trainings we have had so far. It had tools and materials ready for us to use when we got back to our work." (Kallu, NI)

DISLIKES

- "We want the whole training to be given with **adequate time** and preparation." (Everyone's response, Kallu, NI)
- "The training was **more like making an announcement**. It did not have its own separately arranged time for training. It was given as part of another meeting." (Bulle, NI)

OJT: Design

- Training for HC Store Managers and HEW Supervisors in OJT (phase I, II)
  - Phase I: conducted first, targeted HCs identified as direct delivery sites
  - Phase II: targeted HCs identified as PMTCT sites
- Joint supportive supervision to HCs, some HPs
  - Some HCs and HPs had a chance to be visited by USAID DELIVER (1-2 times)
  - In a few woredas, WoHO took the initiative to conduct supportive supervision to HCs, and HCs to HPs.
  - HPs under SCMS support areas didn't receive supervision

OJT: Implementation

June / July

Oct-Dec

HC TOTs - trained 350 staff from 200 HCs nationally

Midline

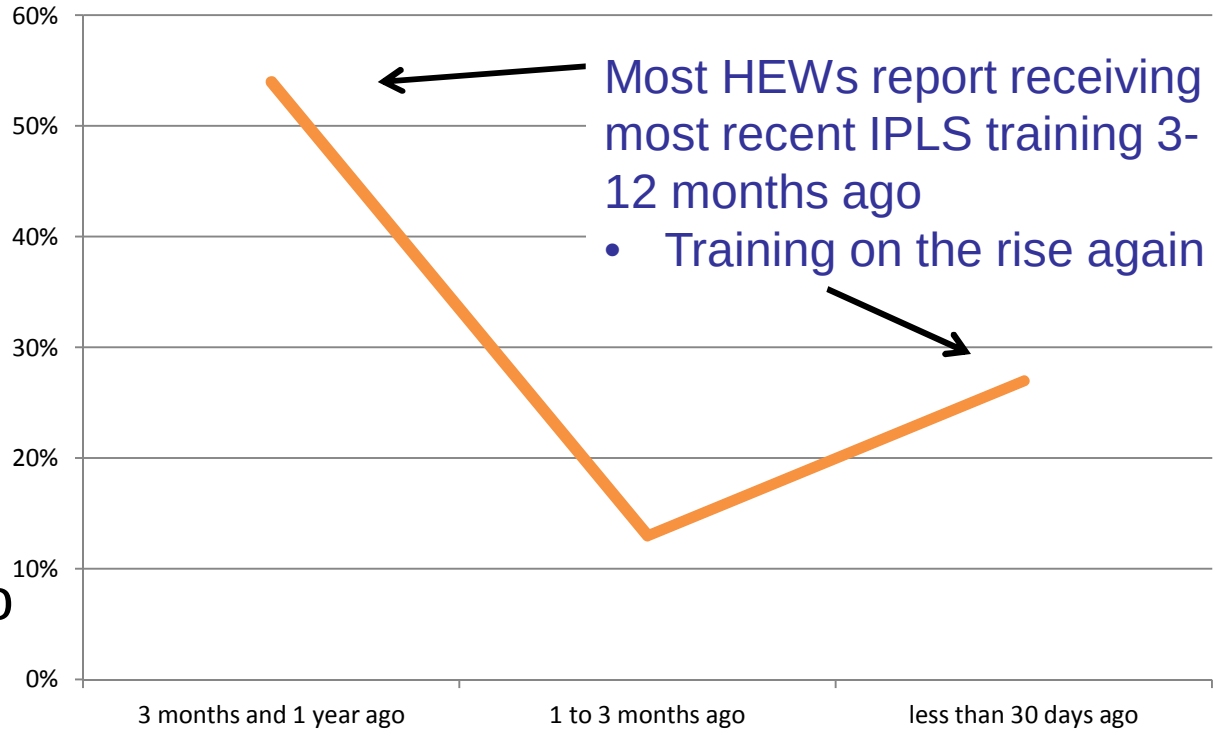
25% HCs report receiving **SC4CCM IPLS for HEWs** (TOT) training

15 of 91 HEWs (17%) report receiving IPLS training

Limitation of results: majority of sampled HEWs had not yet received IPLS training, limiting sample size and possibilities for comparison.

OJT: When & How Trained

- 7 of 15 HEWs trained report receiving most recent IPLS training during monthly HC meeting



- For learning how to complete forms, reports:
  - 3 of 13* HEWs report during a **monthly meeting**
  - 3 of 13* during a **workshop**
  - 4 of 13* from supervisor/**OJT**

Reported variation in delivery settings and methods; training not always implemented as designed

* 2 missing data

OJT FGDs: How Trained

Amhara, the IPLS orientation was provided to all HEWs from 30 different kebeles in the woreda. The training was followed by on-the-job trainings provided monthly at each cluster health center.

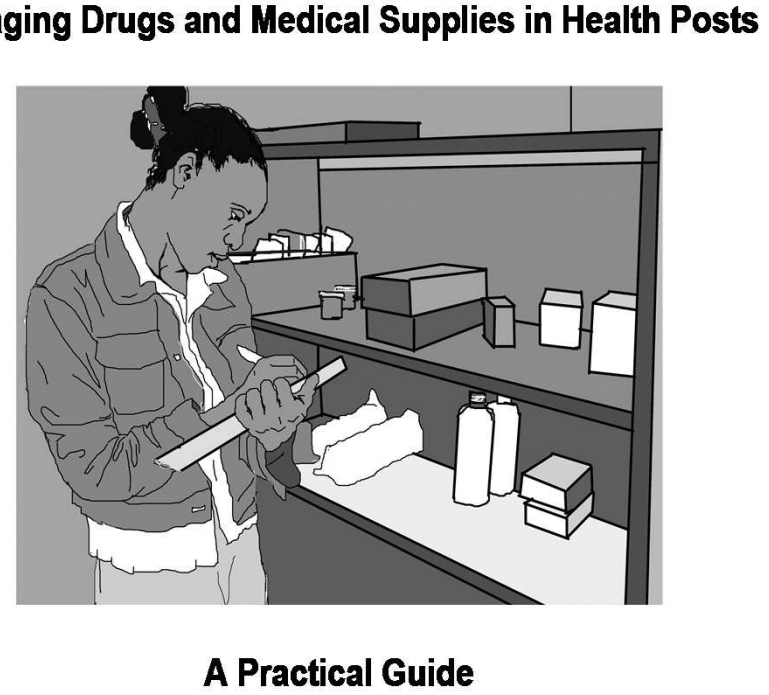
Oromiya, three said they received a 30-45 minute orientation session (rather than full training) at the end of another meeting, and were trained with others, rather than individually.

Note: Roll out had only just began in SNNP at time of evaluation, only one HEW in sample had been trained

Responses reflect varied approaches in how OJT was conducted

OJT: Availability of Tools

- Number of **HEWs trained** in IPLS that have the tools they need:
  - 6 of 15 have flipbook
  - 7 of 15 have blank HPMRR available



OJT: Supervision Topics

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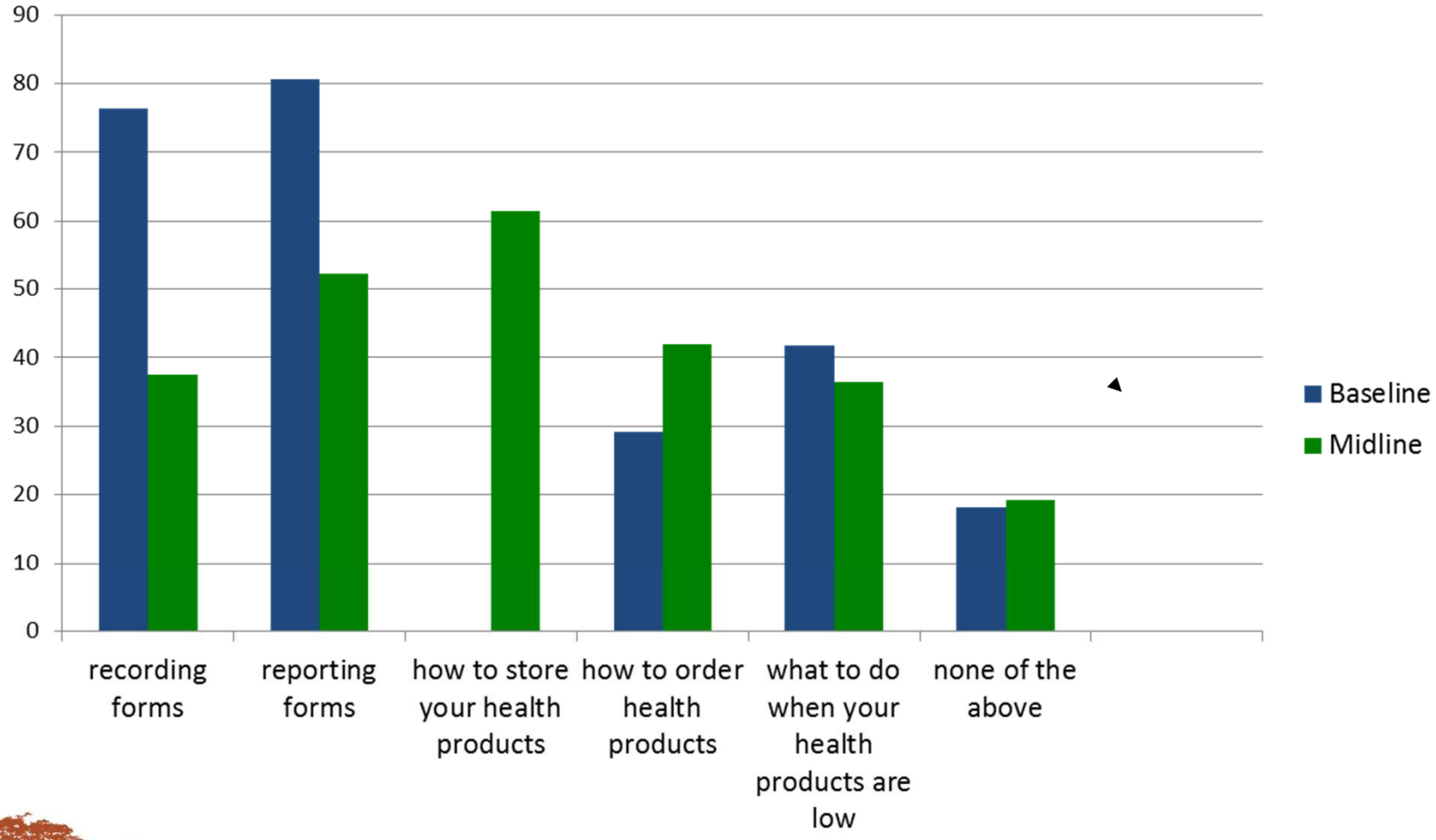

OJT FGDs: Likes and Dislikes

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LIKES

- I liked the training because it gave **new knowledge and skills** that are very much applicable in our work as HEWs (West Belesa, C)
- The three that were trained **liked the content** of the training and the subject matter. (Jimma, C)

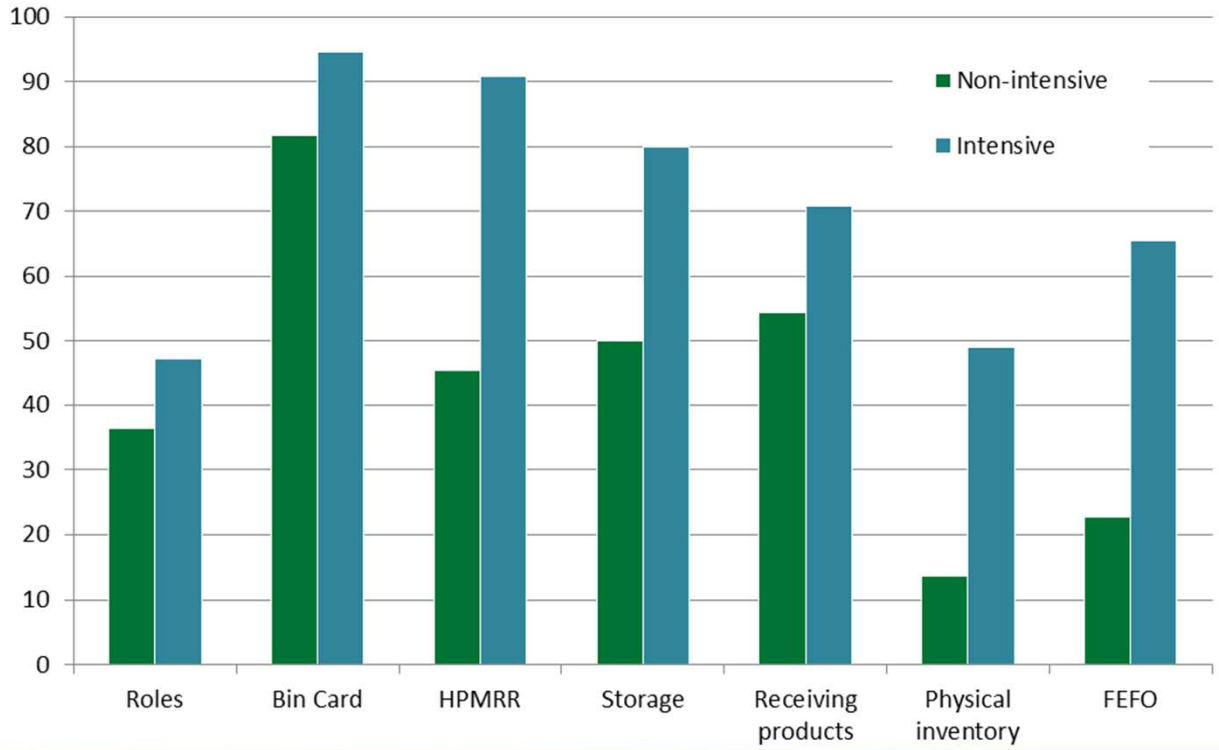
DISLIKES

- Because of the **short period of time**, the training was **not interactive**, but the facilitator lectured. The facilitator demonstrated the filling in of the BIN card, but the participants did not use it in a live setting (only in the class room), and they were given no feedback on any errors during the exercise. (Jimma, C)
- I don't think the training was well organized as enough time was not allocated for it. It was also **rushed** and did not get adequate attention. We **did not understand everything** that was said especially about HPMRR. (West Belesa, C)

Number of Problem Solving Sessions and Topics Discussed

47% of HEWs (I and NI) report participating in a problem solving (PS) session during monthly meetings

- 68% in I (av. 2.7 PS sessions/HEW)
- 26% in NI (av. 2.5 PS sessions/HEW)



(*Comparison - PS not included in design)*

Has Problem Solving Been Fully Implemented?

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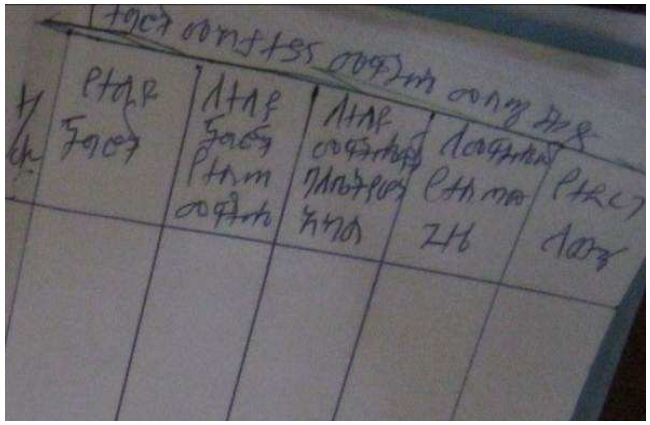
52% HCs report conducting IPLS PS sessions with HEWs: (83% I, 53% NI, C 25%)



Limited use of PS tracking tool (14 HCs)

- Most used in intensive group (8 HCs)
- Most identified 3-4 problems
- Tracking tool in I group was 100% complete
- Problems tracked were identified through PS sessions

Most common PS topics:

- Drug availability
- Lack of transport
- Lack of bin cards
- Challenges with HPMRR forms
- Challenges in storing supplies
- Lack of support

Problem solving may not have been implemented enough to assess its potential

Did Problem Solving Help? Shelving Challenges (FGDs)

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While many HEWs identified the lack of shelving as an important storage challenge….

Even if some of us are making wooden shelves, we still need lockable cabinets to keep Plumpy nut and contraceptive pills from rodents or mice. Rodents are a problem for us. Due to the nature of the health post floor which is not cemented, products are constantly being eaten and damaged by rodents. (Yilma Densa, I)

We have repeatedly requested the WHO to give us shelves but they told us there are no shelves. They advised us to use whatever we find to store medicines and keep documents. (W. Belesa, C)

In a few cases, HEWs referenced solutions that had been provided by supervisors

The training was very practical. We used our own examples to practice on the different tools such as BIN cards, and HPMRR. **We discussed how a model shelf can be prepared from local wooden material**. (Yilma Densa, I)

Did Problem Solving Help? Transport Challenges (FGDs)

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Few solutions to this transport problem were identified, but rather the HEWs were consistently reminded that it is their individual responsibility to transport medicines from cluster health centers to their health posts.

Problem solving has not been fully implemented so not uniformly helpful in addressing problems.

In Amhara, some HEWs report that their kebele and community leaders were helpful in solving some of their problems. In particular, they were able to help in obtaining some unavailable medicines and assisting with transport of vaccines and medications.

In Oromiya, some HEWs borrow mules from the kebele head, but also often have to pay for their use.

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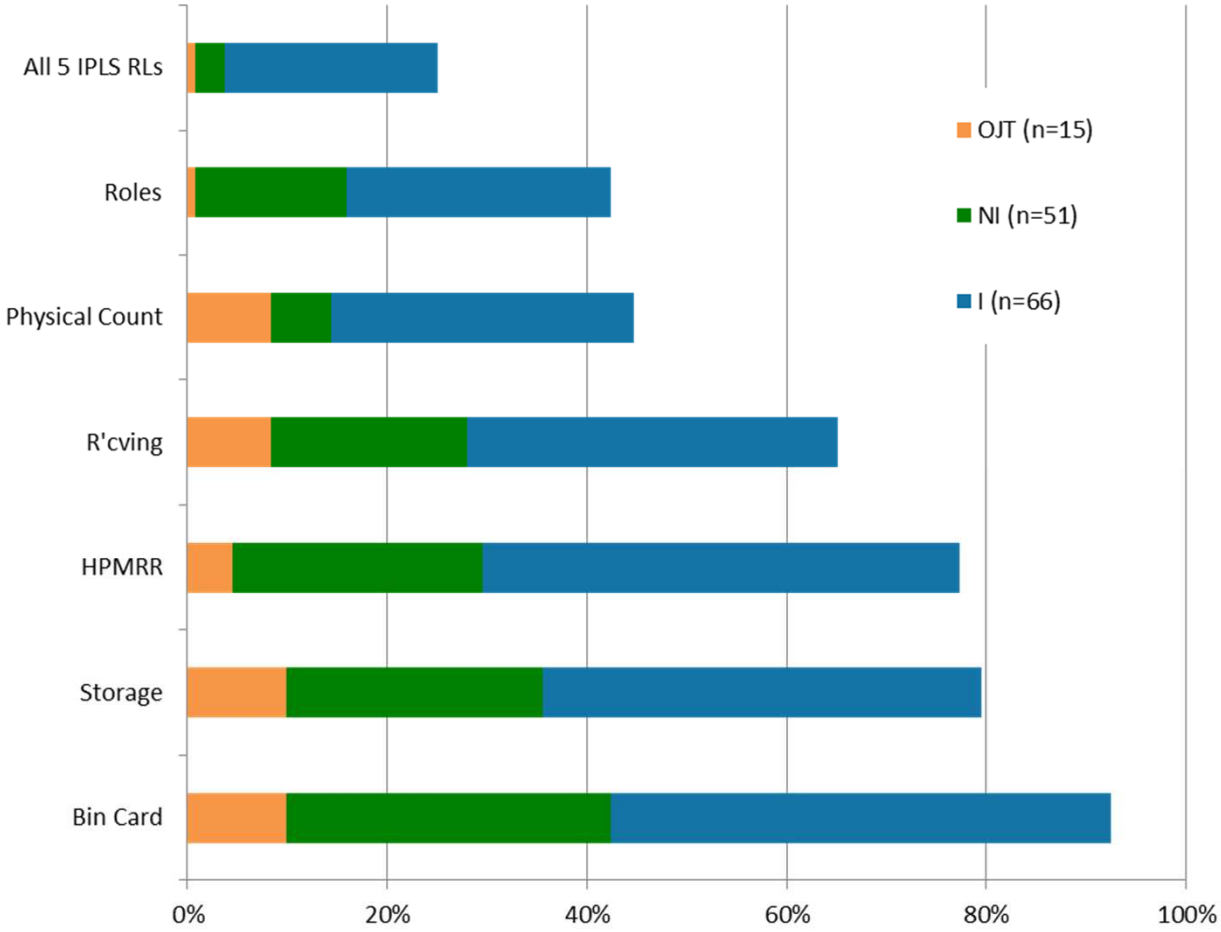
Application of Training for Key Competency Areas

SC4CCM

Supply Chains 4 Community Case Management

% HEWs Trained in IPLS by Topic



45% HCs report providing and **25% HEWs** report receiving training in **all 5 IPLS topics (over 6 month period)**

- 92% HEWs report being trained on bin cards, 80% on storage and 77% on HPMRR
- IPLS1 (Roles) received the least amount of training

What Did HEWs Do Differently After Trainings?

The majority of HEWs cited changing practices with bin cards and storage after being trained

After taking the training, I was able to rearrange the medicines on a shelf with labels and BIN cards on them. It is easy for anybody to tell which medicines are available or not. (Kallu, NI)

We were able to do physical inventory as a result of taking IPLS training. We did not know why and how inventory is done before (Yilma Densa, I)

After the training I separated all products I had in my store based on their category. I arranged them based on FEFO and undertook physical inventory for each product and I also opened BIN card for each product after the physical inventory was done. We didn't do things this way before. We used to only learn about stock out of a product when we couldn't find it to give it to the patient. **Another example, we started requesting for products that are already limited in quantity before it is stock out**. (Sorro, I)

We opened a BIN card after the training. We also rearranged products based the type of the medicine and their expiry date. (Bulle, NI)

Maintaining Bin Cards: HEWs

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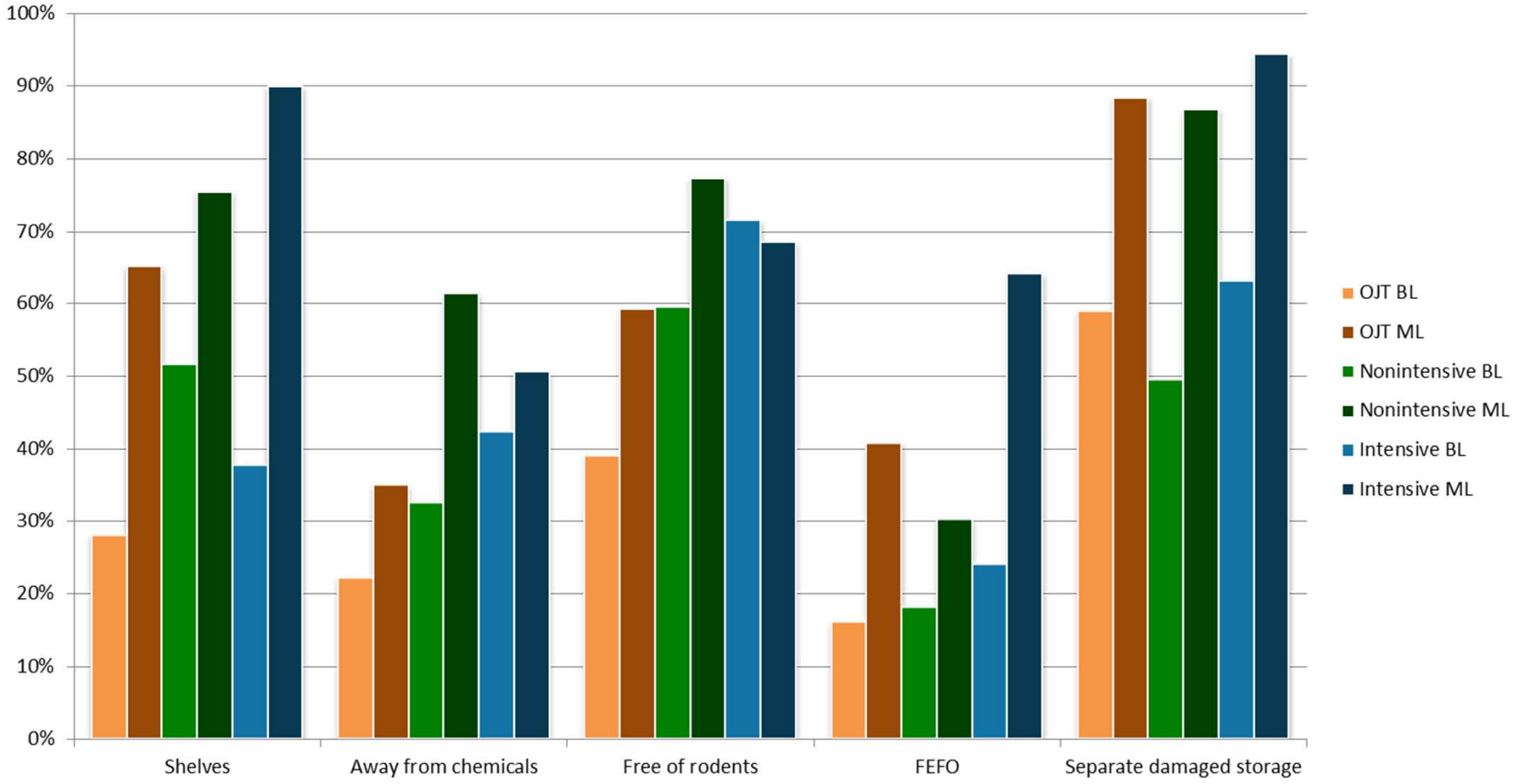
	Non-intensive	Intensive
	%	%
Cotrimoxazole 120mg	38	81
Amoxicillin 250mg	36	71
Coartem 1x6 tablets	13	17
Coartem 2x6	11	20
RDT	27	64
Zinc 20mg	60	79
ORS	32	70
RUTF	38	47
Male condoms	33	60
Depo Provera	47	89
COCs	39	68

- HEWs have begun using bin cards for most products
  - **NO HEWs** with bin cards at BL in any arm for any product
- Availability of bin cards **highest** for all products in **intensive** group
- Most HEWs have ~2 months of bin cards available
  - Highest percentages in intensive group

OJT sample too small to compare with other arms

Adequate Storage Conditions at HPs BL vs. ML



- Significant improvements in all storage conditions across all groups except rodents at midline vs. baseline
- Big improvement in shelving across all groups

Reporting with HPMRR

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At baseline, 89% of HEWs said that they complete reports regularly and submit to higher levels. However there was no standard logistics report that the HEWs submitted. Instead HEWs mentioned 6-7 different reports (logistics report, medical product request form, monthly request forms, quarterly drug reports, bi-monthly report, logistics report and activity report) that they submitted regularly with no single report having more than 30% of HEWs using them.

Midline

	Intensive	Non-intensive
HPMRR forms supposed to be sent to resupply health centers (HEWs trained)	98%	82%
HPMRR forms should be submitted every month to the higher level (HEWs trained)	97%	73%
HCs who report HPs bring up reports to the right place (HC PM trained)	89%	75%

Use of standard logistics reporting form greatly improved after training across all groups.

Did IPLS training affect HEW motivation levels for SC tasks? (FGDs)

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In Amhara and Oromiya, HEWs stated that practicing good supply chain management, availability of medicines, and access to useful tools were sources of satisfaction for them. They also expressed increased motivation as a result of the IPLS training. In particular the IPLS guide was found to be very helpful as a reference after the training.

"All the respondents agreed that the training motivated them to perform their supply chain work more effectively, because the training give them new knowledge which was not there before, it enabled them to provide better service for their clients, it enabled them to manage stock properly and it made their stock management easier." (Dodola, I)

Competency Skills

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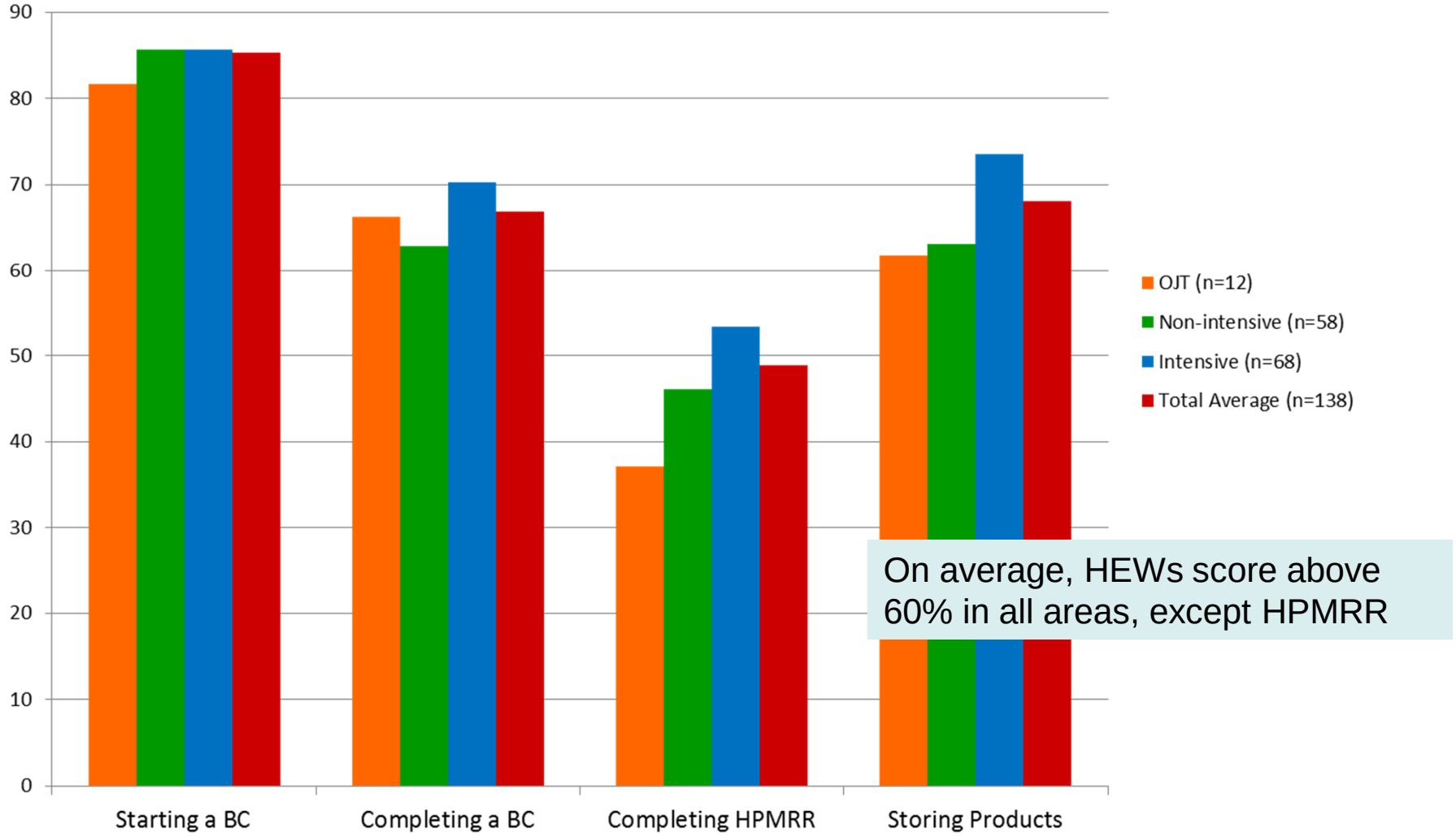
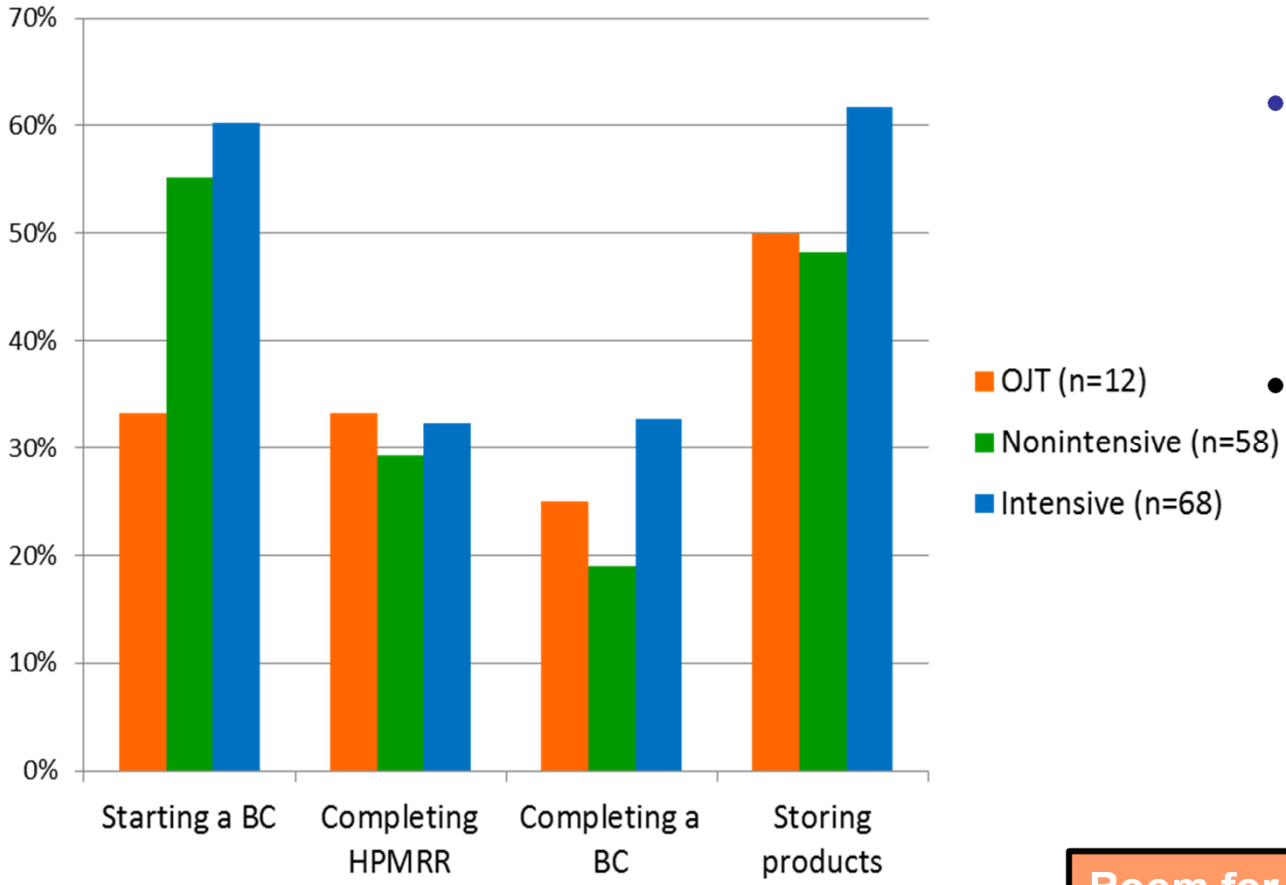
Do higher levels of training, tool availability and application of knowledge in intensive and non intensive arms translate to differences in competencies between different groups?

Average Weighted Score by Competency Area and Arm, National Level



On average, HEWs score above 60% in all areas, except HPMRR

% HEWs with **All** Most Important Answers Correct by Competency Area and Arm



- **No significant different between intervention arms**
- Few HEWs (~30%) were able to complete a bin card and HPMRR

Room for improvement in all competency areas, especially HPMRR and completing a bin card

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What Does it All Mean?

Training Results Summary

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- Most training of IPLS for HEWs was not implemented as designed across arms
  - HC staff used a variety of opportunities to train HEWs
  - HC staff tended to train HEWs in groups across all arms
- IPLS training for HEWs by HC staff was effective in improving competency, but no significant difference in competency across groups
- Training with follow up support results in better coverage and tool availability: intensive group vs. non intensive group
- **Bin card** is most common topic for training and problem solving across all groups

Other Factors That May Affect Competency

Low competency in completing bin card and HPMRR could be due to:

- One time training not sufficient for complex tools, such as bin card and HPMRR. They might require repetition of group training and/or OJT.
- Language barriers as both forms are in English
- HPMRR may not be completed frequently, so due to insufficient practice HEWs have not yet mastered the skill.
- **Competency measurement may be more meaningful after a longer period of time (another 6 months)**

Important Elements of Training – Identified by Regions

- What did the HEWs say?
  - SNNP - Whether a budget is available or not it is better if HEWs take training in a group
  - Oromia - Group training is recommended; include experience sharing among HEWs
  - Amhara - Trainers should come to HP and train us on how to use the tools (OJT) and how to arrange our products in the stores

Important Elements of Training – Identified by Regions

Other Levels:

- Problem solving component is very important for strengthening IPLs at HEW level
- OJT, though expected to be done individually, in actual practice has been conducted as a group, at HC
- Training should be practical and include demonstration
- Use existing opportunities such as review meetings and salary days to conduct trainings at HC and WoHO level
- Integration of IPLS activities with general health-integrated checklist
- Conduct regular review meeting, experience sharing, recognition of HEWs
- Include community to mobilize resources for sustainability

Recommendation

- Trainings for HEWs should be interactive and practical with demonstrations.
- Trainings should use existing opportunities such as other trainings, or planned meetings with HEWs
- WoHO to provide follow up and support to HC staff following TOT to implement the HEW IPLS trainings
- Follow up to HEWs from initial training through supportive supervision and repeated training sessions or OJT as needed.