



ENTERPRISE MOBILITY

2008 Enterprise Mobility Market Barometer



Healthcare Review

Motorola Enterprise Mobility business (EMb) Market Intelligence

February 2008

2008 Enterprise Mobility Market Barometer

Healthcare Industry Mobility Review



- **Overview and Methodology**
- **Enterprise Mobility Viewpoints**
 - Healthcare Mobility Decision Maker
 - Physician Community
 - Nurses
 - Patients
- **Healthcare Mobility Investment Strategy**
- **Healthcare Mobile Applications and Investment Drivers**
- **Summary**

Enterprise Mobility Market Barometer

Voice of the Mobile Enterprise



Enterprise mobility has emerged as a top strategic initiative among leading global organizations.



To benchmark the current state of Enterprise Mobility, Motorola conducted independent research with decision-makers and mobile workers.



Provides the industry's deepest view into the mobility mindset via direct feedback from key decision-makers and mobile workers.

The Enterprise Mobility Barometer provides an understanding of the opportunities and challenges that mobility poses to enterprises.

Enterprise Mobility Market Barometer

Voice of the Mobile Enterprise – Key Areas of Focus



- How are enterprises and mobile workers using enterprise mobility solutions?
- Which mobile and wireless technologies are greater penetrating the enterprise?
- Which vertical industries are adopting mobility?
- What applications are driving mobile workforce investments?



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Key Findings

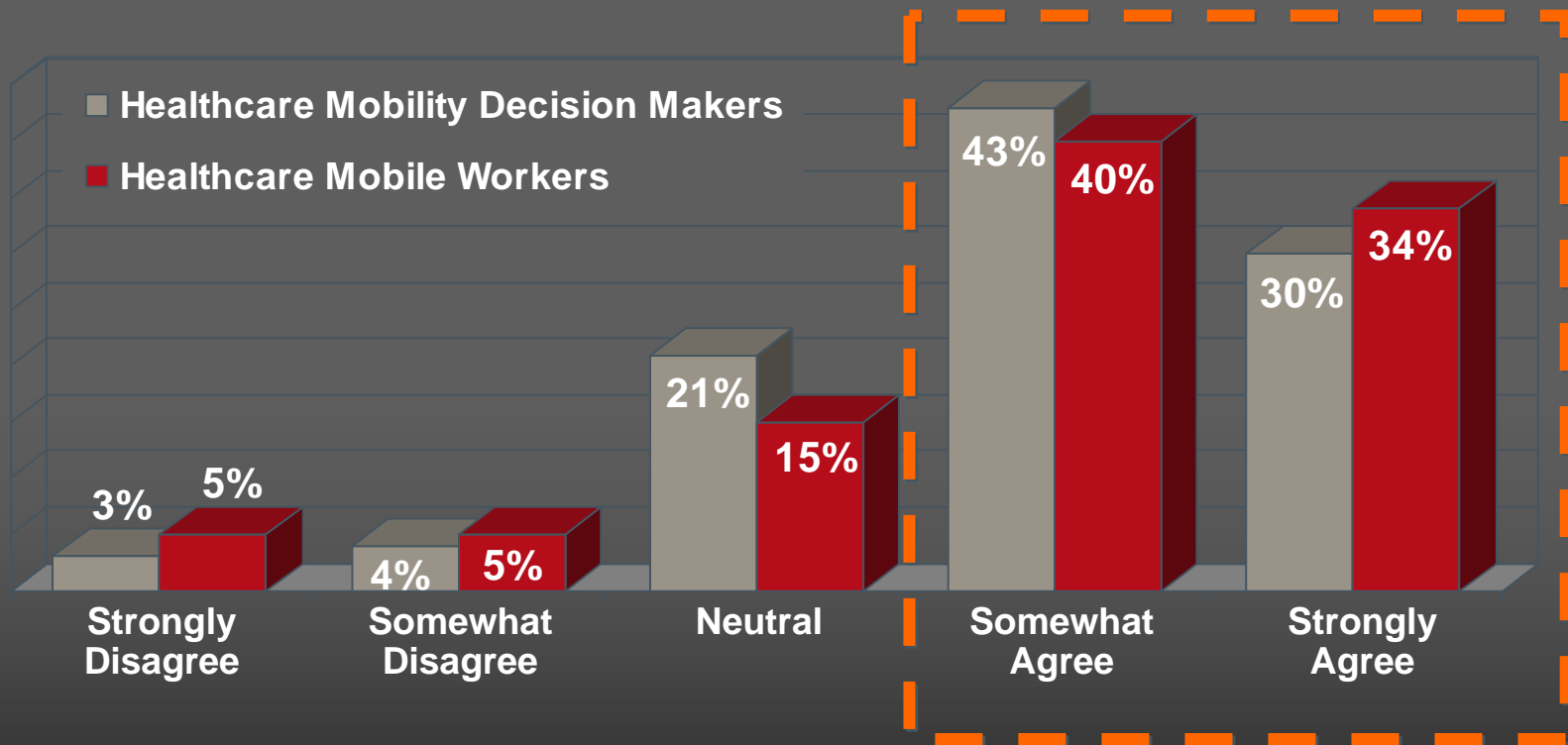


- **Mobility continues to rise in importance in healthcare** driven by industry challenges such as the rise in medication delivery errors, the inability to locate supplies & equipment and a lack of real-time access to records. An overwhelmingly majority (73%) of mobility decision-makers and mobile workers (74%) stated that mobility is more important today than it was last year.
- **Mobility is viewed as key error-proofing tool as** 73% of physicians and 71% of nurses felt the usage of mobility can aid in the reduction of medical errors.
- **Key application investment drivers include medication administration, patient monitoring, records/document management and drug delivery.** Cited challenges include software and integration costs, hardware costs, security concerns, interference and performance problems, mobile device and infrastructure management, integration issues and the inability to meet compliance guidelines.
- **Healthcare mobile workers, physicians and nurses have realized immediate benefits and productivity gains due to the utilization of mobile technologies and solutions.** More than 1 in 4 (31%) of surveyed healthcare mobile workers are able to recover at least 50 minutes per day due to the utilization of enterprise mobility solutions.

Mobility's Importance in Healthcare Rises



Q: "Mobile technologies are more important to my organization today than they were last year."

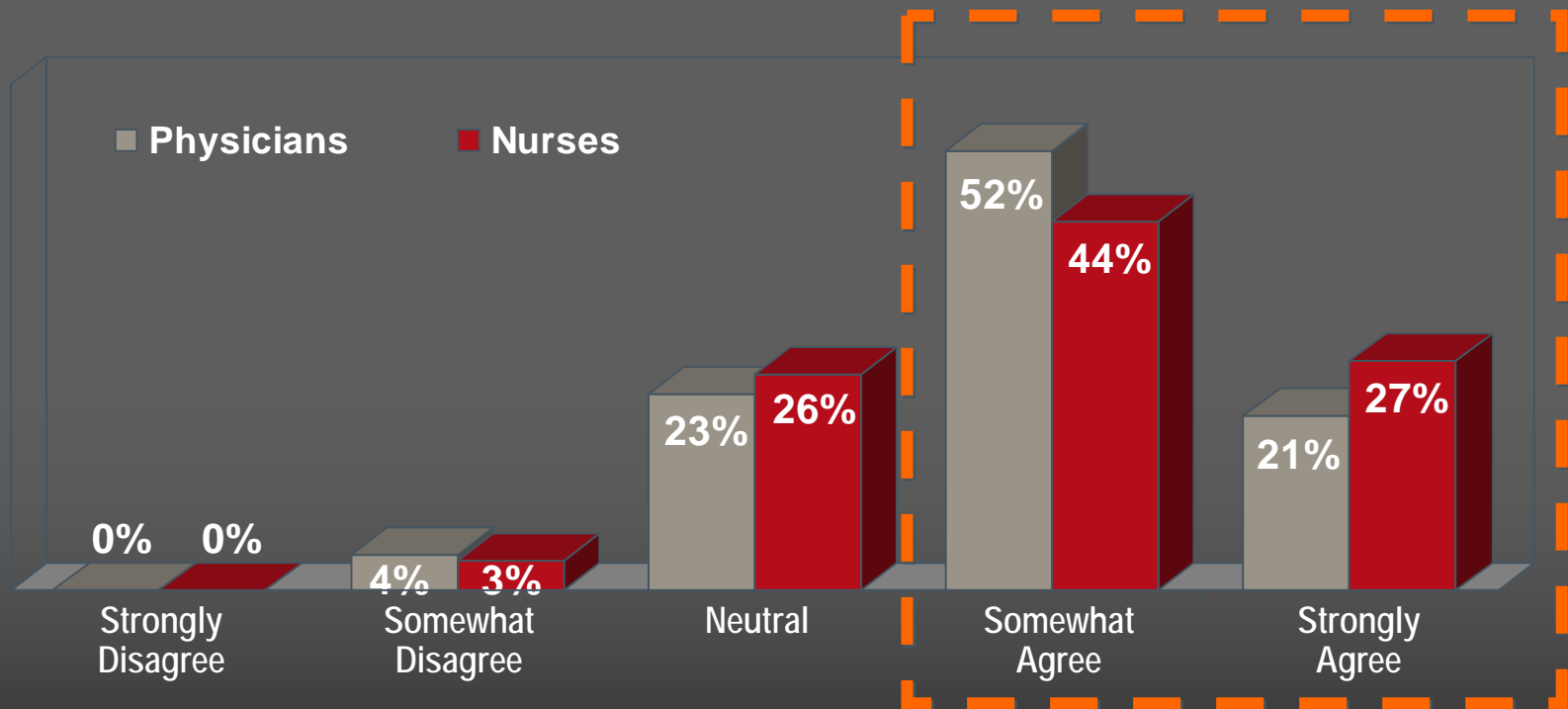


An overwhelmingly majority (73%) of mobility decision-makers and mobile workers (74%) stated that mobility is more important today than it was last year.

Mobility – A Key Error-Proofing Vehicle



Q: “Handheld mobile computing devices help reduce the number of medical errors.”

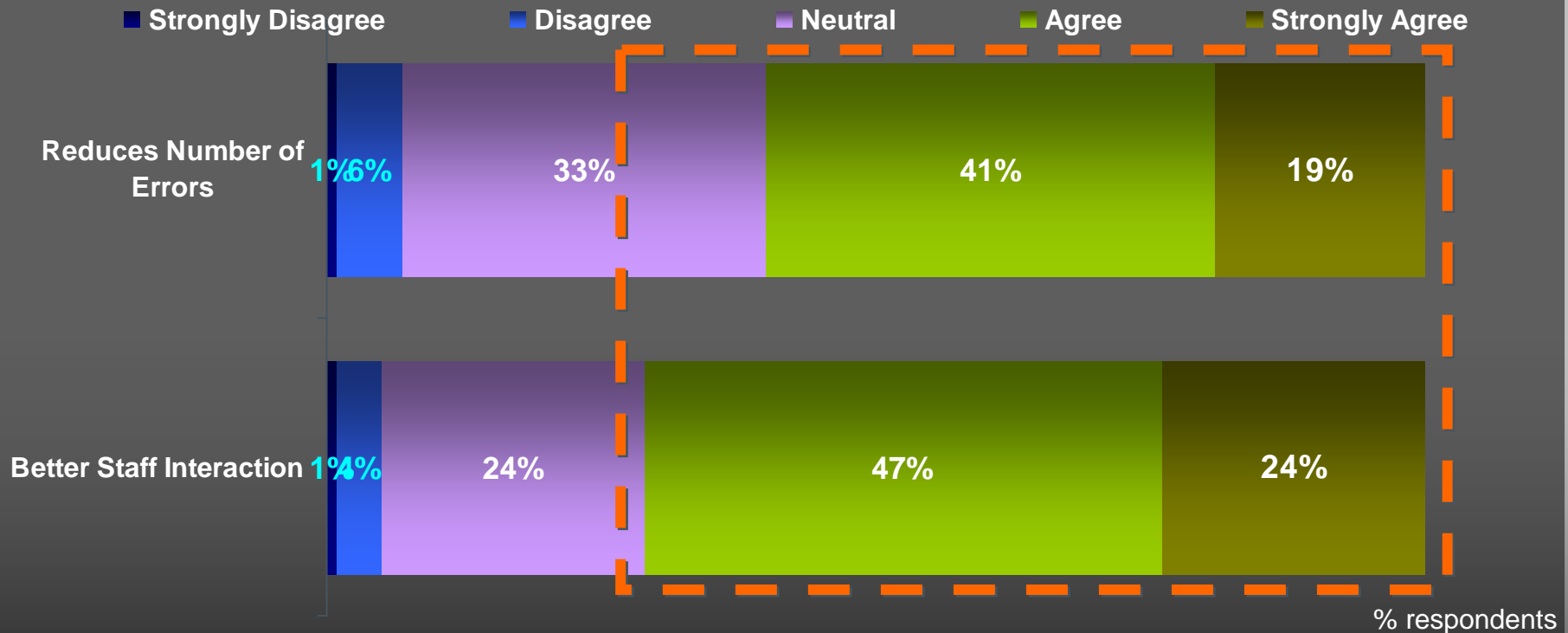


An overwhelmingly majority (73%) of physicians and nurses (71%) stated that the usage of mobility in clinical settings can aid in the reduction of medical errors.

Patients Also View Mobility as Key Tool



Q: "Do you feel that the usage of handheld mobile computers can reduce the number of errors in clinical settings and allow for better staff interaction?"



Consumers feel there is better interaction among their doctor(s) and nurses (71%) and the number of medical errors are reduced (60%) when mobility is introduced.

Mobility Benefits and Challenges in Healthcare



Q: “What are your organization’s key benefits and challenges with regard to the deployment of mobile and wireless technologies?”

Key Mobility Benefits

- PRIORITY RANKING**
1. Access or track patient data more quickly
 2. Empower employees to be more productive
 3. Fast, reliable wireless communications
 4. Improved customer service
 5. Efficient deployment of staff

Key Mobility Challenges

1. Cost of software, integration, service, and support
2. Cost of hardware
3. Security concerns
4. Interference/performance problems
5. Mobile device and infrastructure management

Mobility Friction Points – All Industries



“*...Customer tracking benefits.*”

— Director of IT, Transportation
\$100-\$249 Million (Revenues)
250 to 499 (Employees)



“*...Mobile productivity of workforce.*”

— Program Manager, Hi-Tech Manufacturer
\$10-\$19.9 Billion (Revenues)
25,000 to 49,999 (Employees)

“*Time savings...*”

— Operations Manager, Construction and building
\$100-249.9M (Revenues)
500 to 999 (Employees)



Mobility Friction Points – All Industries



““ Invades in personal time. Always feel connected to work... ””

— Manager/Associate
\$10-19.9 Billion (’Revenues)
25,000 to 49,999 (Employees)



““... My organization (agency) has difficulty getting the various technologies to mesh.””

— Consultant
Utilities/Government

““ The training is often lacking most more than all other things... ””

— Supervisor, Wholesale Trade
\$10-19.9 Billion (’Revenues)
10,000 to 24,999 (Employees)



Mobility Pain Points Faced in Healthcare



“*Not everyone uses their mobile device when they are supposed to...sometimes, they leave their mobile device on the desk rather than carrying it.*”

“*Inability to see and quickly review the whole medical record as quickly as with a paper chart.*”

“*Finding one that's not in use; battery life; finding an unused outlet near my work station; multiple applications AND paper exist in the workplace, no single-app solution...*”



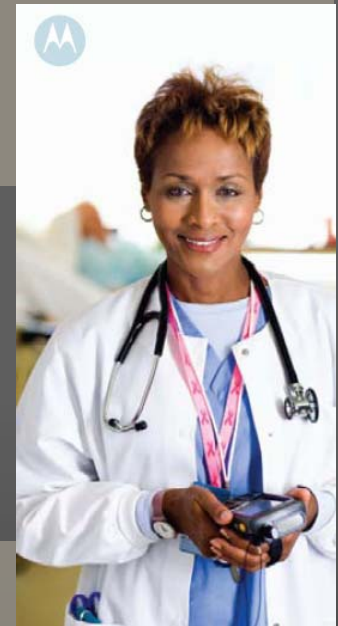
Mobility Pain Points Faced in Healthcare



““ *Doesn't always work well or when you're trying to page someone it doesn't understand you and gives different name.*””

““ *Chance of contamination from blood or bodily fluids. not always convenient to carry (i.e. in pocket or on-belt) may fall out.*””

““ *Making sure all securities are in place to enable that all HIPPA guidelines are followed...*””



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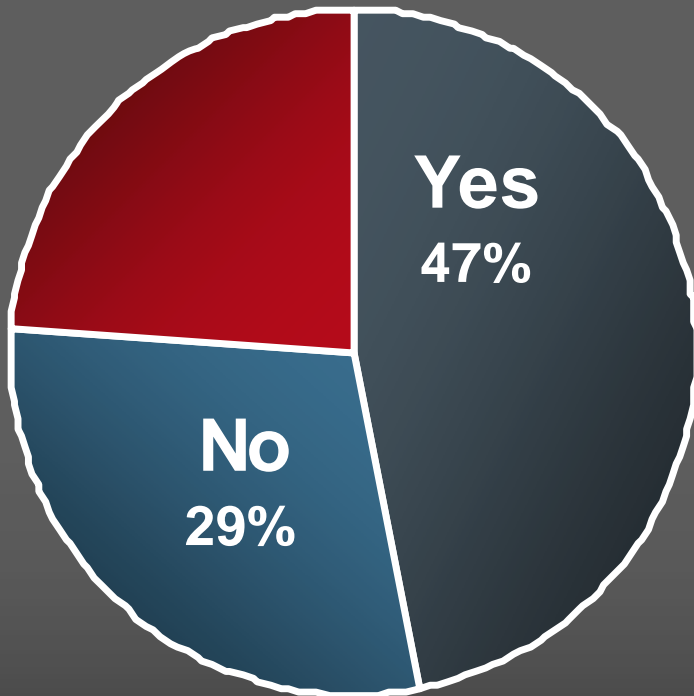


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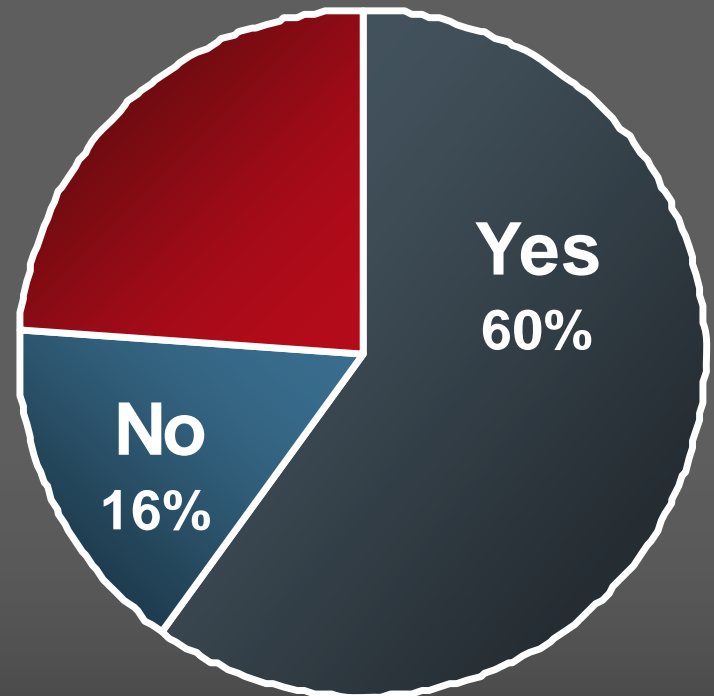
Mobility Strategy Management in Healthcare



Q: "Does your organization currently have a corporate-wide mobility strategy?"



Decision-Maker Viewpoint



Mobile Worker Viewpoint

Nearly one-half of surveyed enterprises within the life science and healthcare industries do not have a corporate-wide mobility strategy.

Mobility Responsibility in Healthcare



Q: “Which department is responsible for the management of your organization’s mobility strategy?”

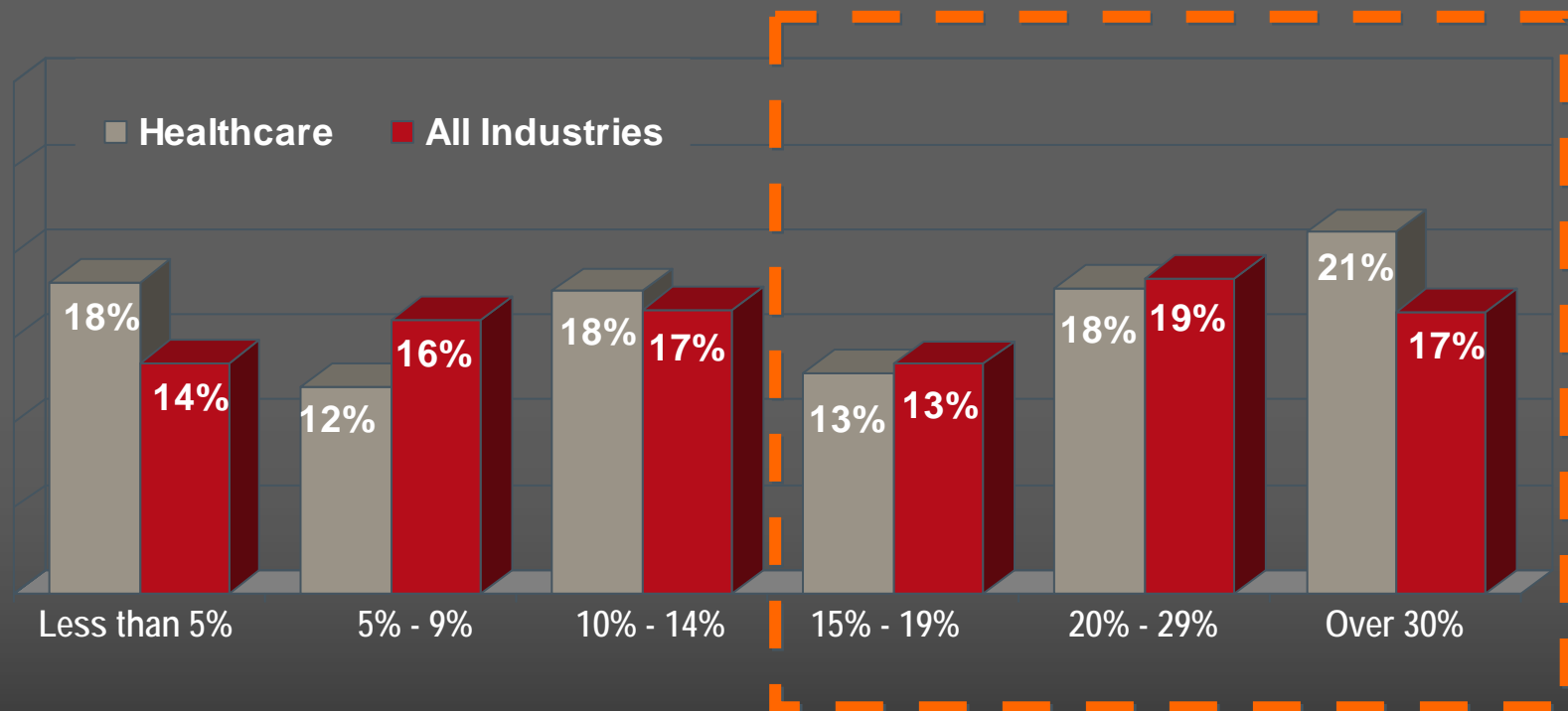
	Decision Maker	Mobile Worker
Administration	13%	13%
E-business department	5%	5%
Department Manager	3%	3%
Finance	3%	2%
General management/LOB	4%	3%
HR	2%	2%
IS/IT department	55%	57%
Operations/facilities	3%	3%
Purchasing	1%	3%
Telecom department	4%	7%

IT has taken on greater control of their organization’s enterprise mobility strategy.

Mobility – A Rising Allocation of IT & Telecom Spend in Healthcare



Q: “What percentage of your organization’s annual IT/telecom services budget is currently committed to mobile and wireless technologies?”

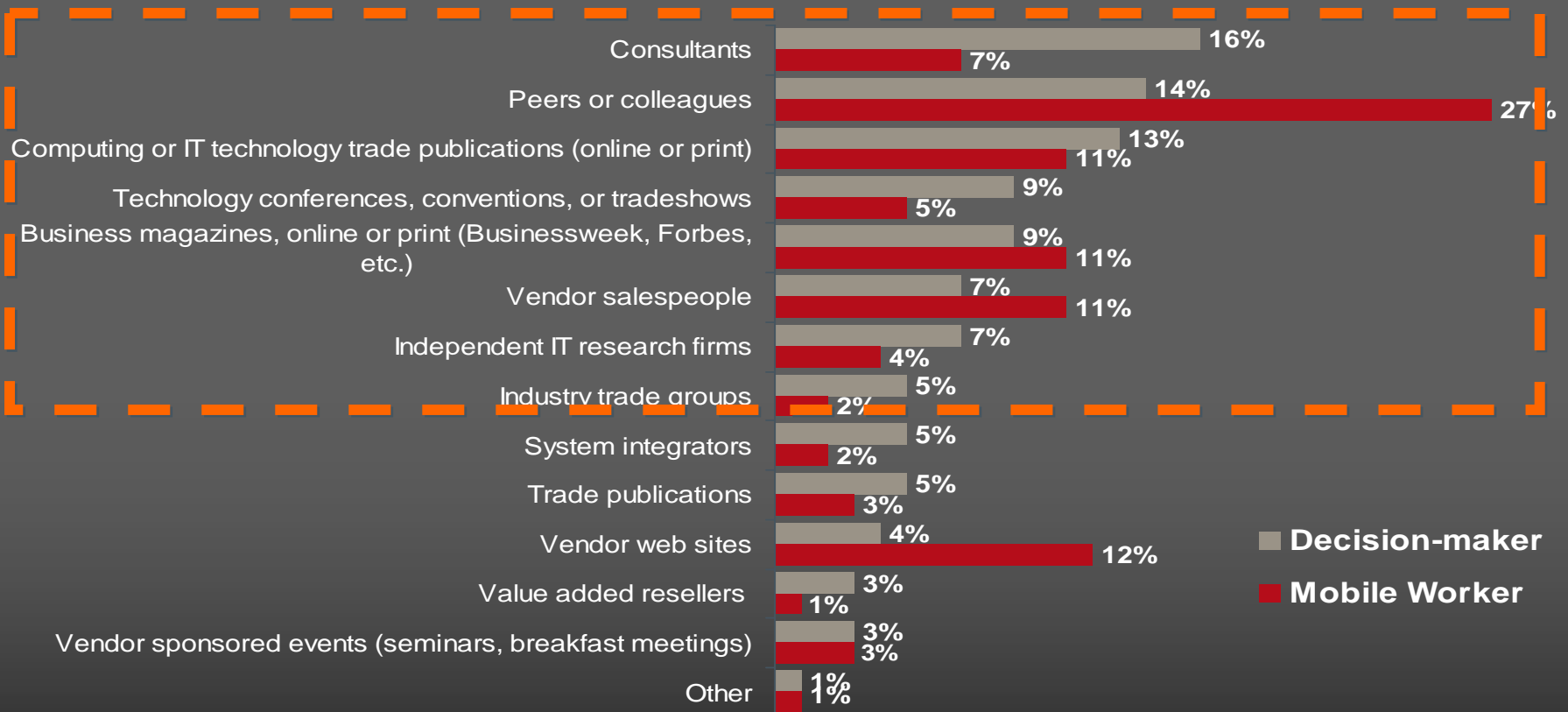


Over one-half (52%) of Healthcare mobility decision-makers allocate more than 15% of IT spend towards mobile and wireless technologies.

Mobility Marketing Influencers in Healthcare



Q: “When researching and comparing mobile and wireless products and services, which information sources do you rely on to gather information?”

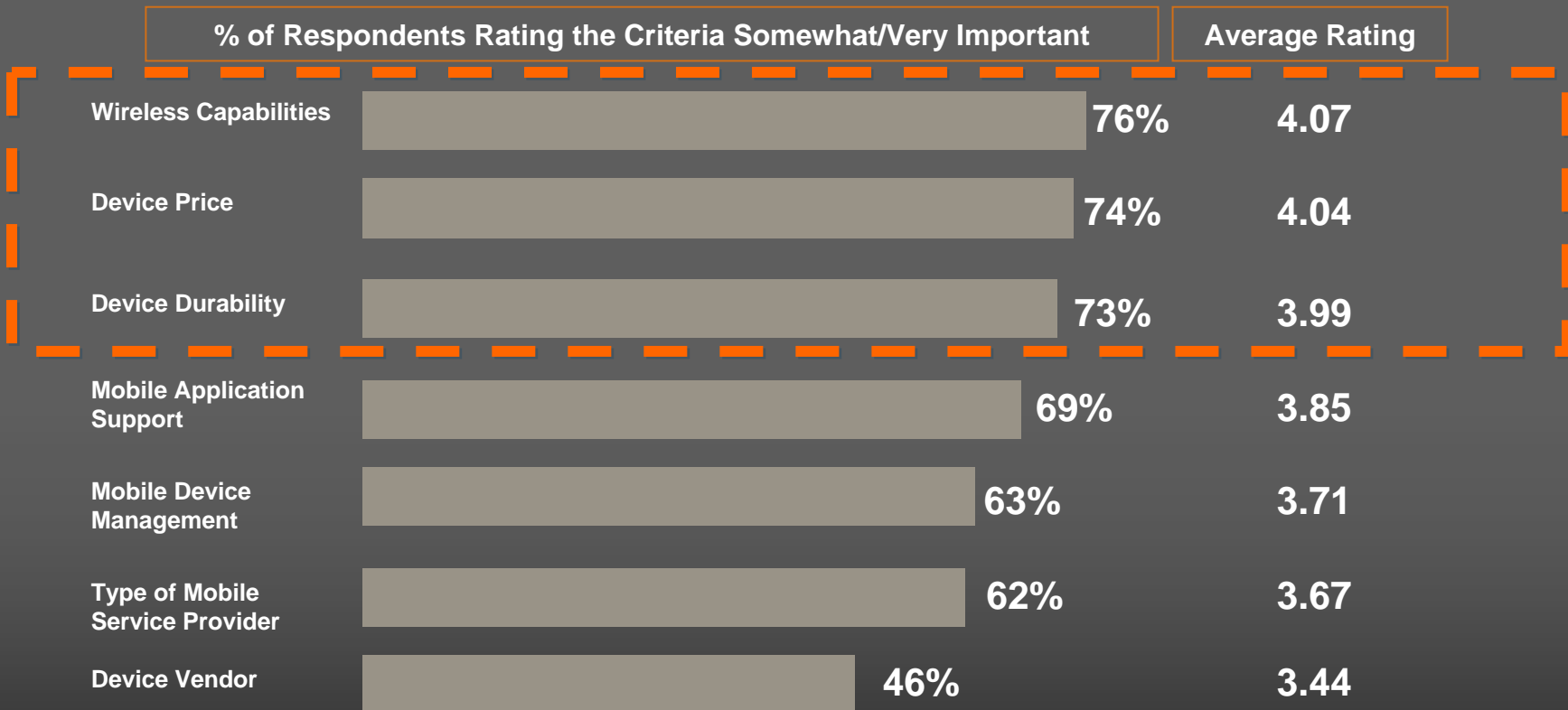


For decision makers, IT trades and consultants are a key marketing influence. Conversely, mobile workers greater rely upon peers or colleagues for guidance.

Enterprise Mobility Device Criteria Ratings in Healthcare



Q: “Which of the following criteria does your organization find MOST IMPORTANT when evaluating mobile devices? (1=Not Important, 5= Very Important)



Key enterprise mobility decision-maker criteria include wireless capabilities, device price and device durability.

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Healthcare Mobility Investment Drivers



Q: “What are the KEY applications driving your mobile device investment in a hospital/health services environment?”

Key Investment Drivers (Prioritization)

Medication Administration (14.8%)

Patient Check-In/Out (11.3%)

Records/Document Management (11.3%)

Drug Delivery (9.6%)

Wireless Email (8.6%)

Laboratory Management (8.2%)

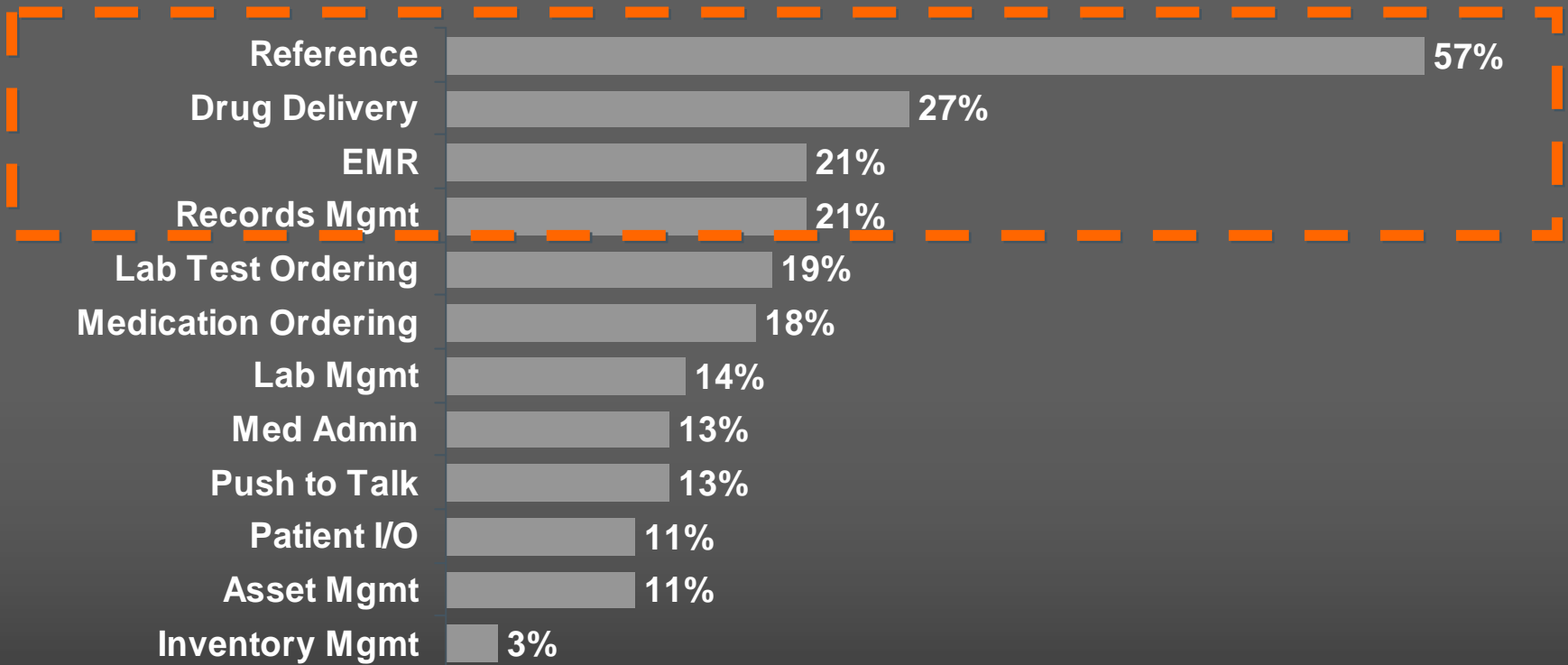
Asset Management/Tracking (5.5%)



Non-Voice Applications – Physicians



Q: “What type of applications are you using on your handheld mobile computing device for your work-related activities?”

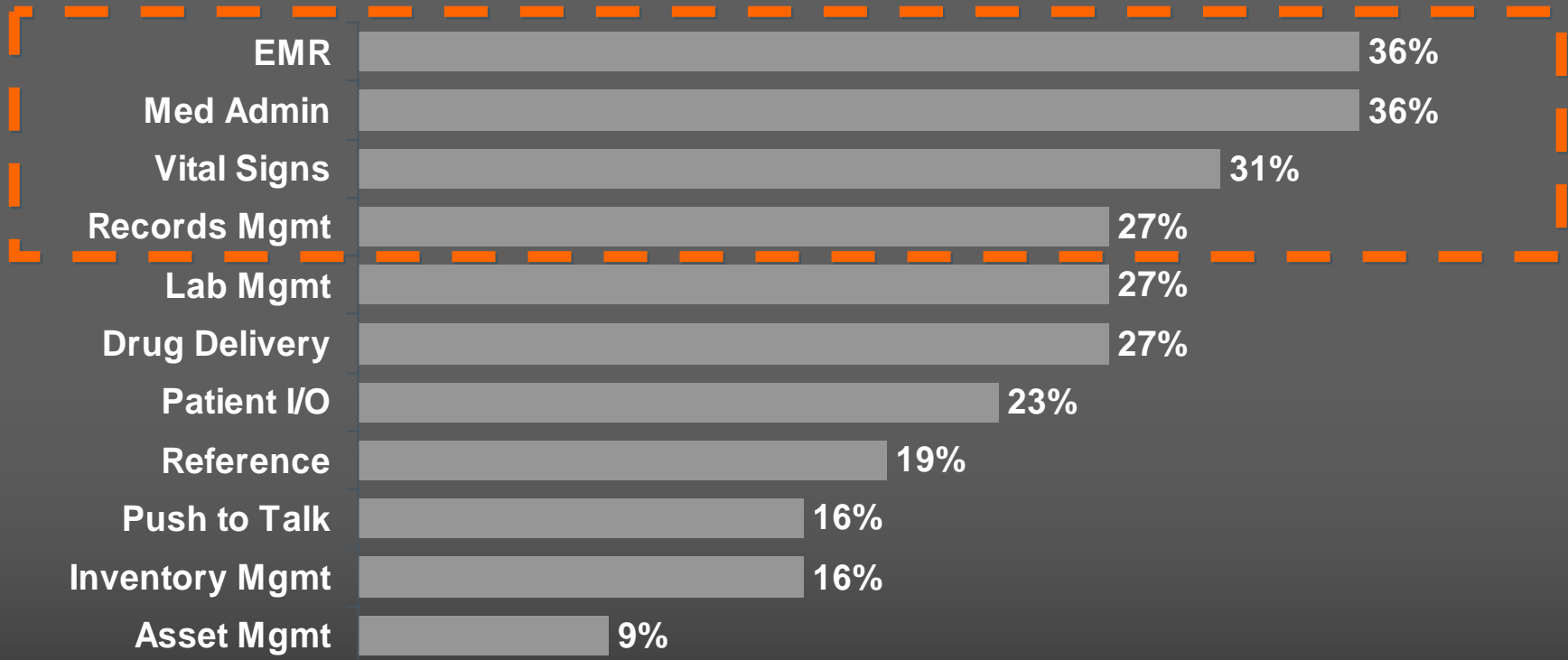


A large percentage of physicians use non-voice mobility applications such as reference applications, drug delivery, EMR and record management.

Non-Voice Mobility Applications – Nurses



Q: “What type of applications are you using on your handheld mobile computing device for your work-related activities?”

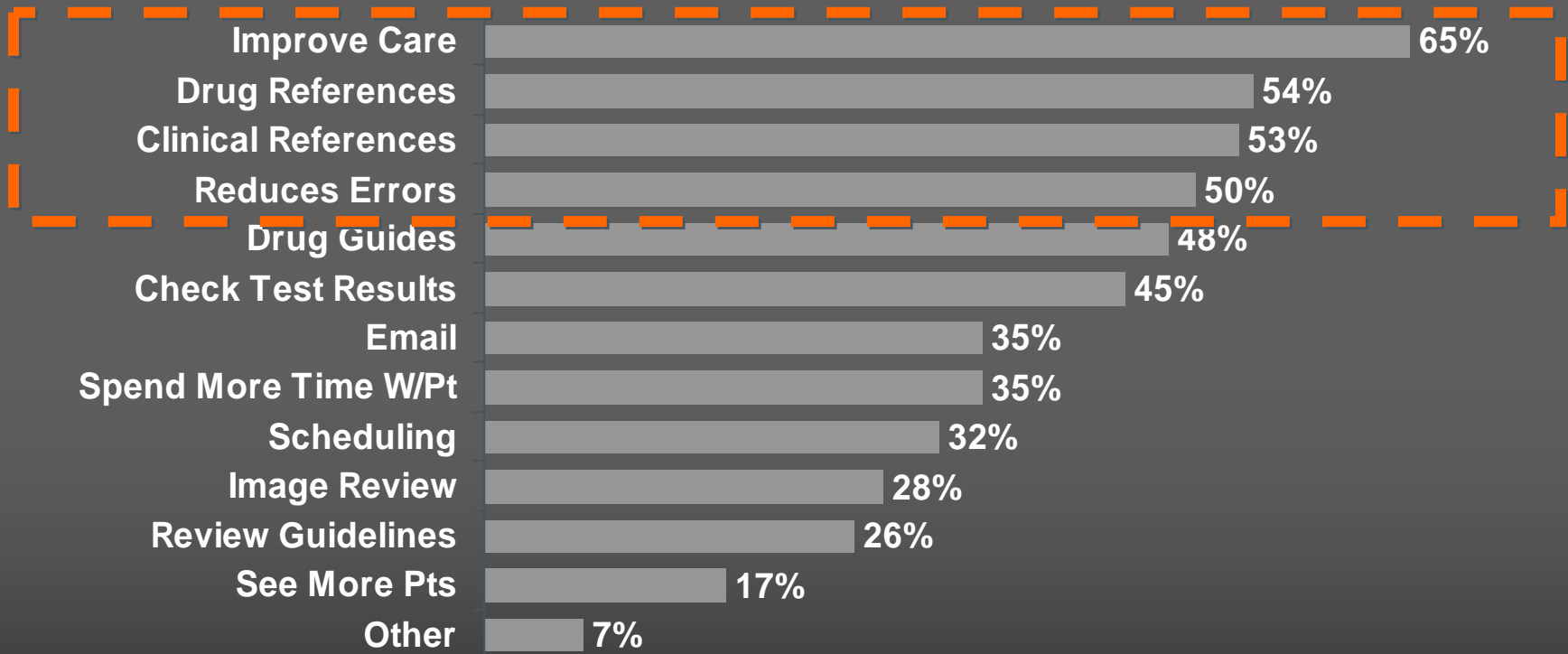


Non-voice mobility applications utilized by nurses include EMR, meds administration, vital signs and records management.

Nurses Have Seen the Impact of Mobility...



Q: "For what reasons do you feel a handheld mobile computing device is necessary or would be helpful?"

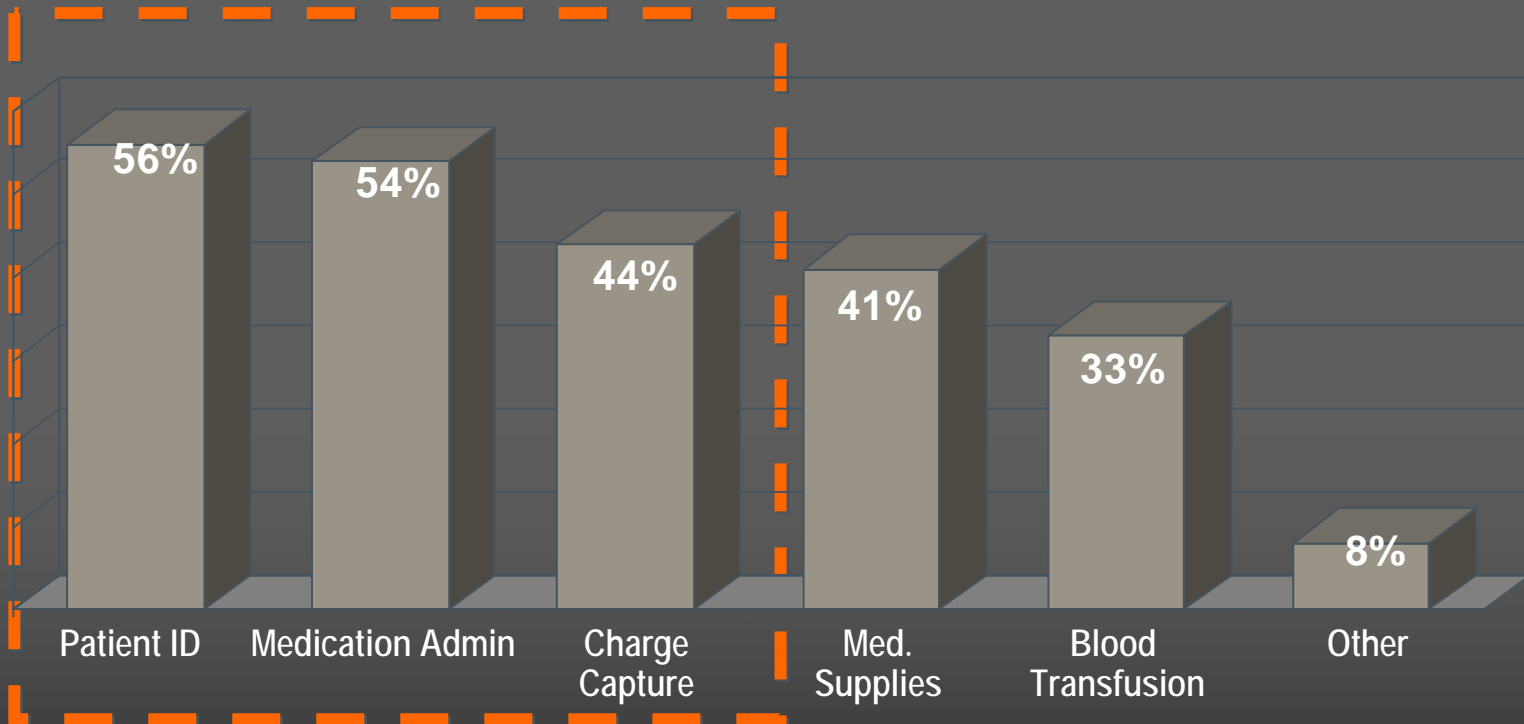


Nurses cited that key mobility benefits include improved care, drug references, clinical references and a reduction in errors.

Aided by Rising Usage of Bar-Code Scanner Solutions for Key Applications



Q: "Which bar coding solutions do you plan to be using in the next 12 to 18 months?"

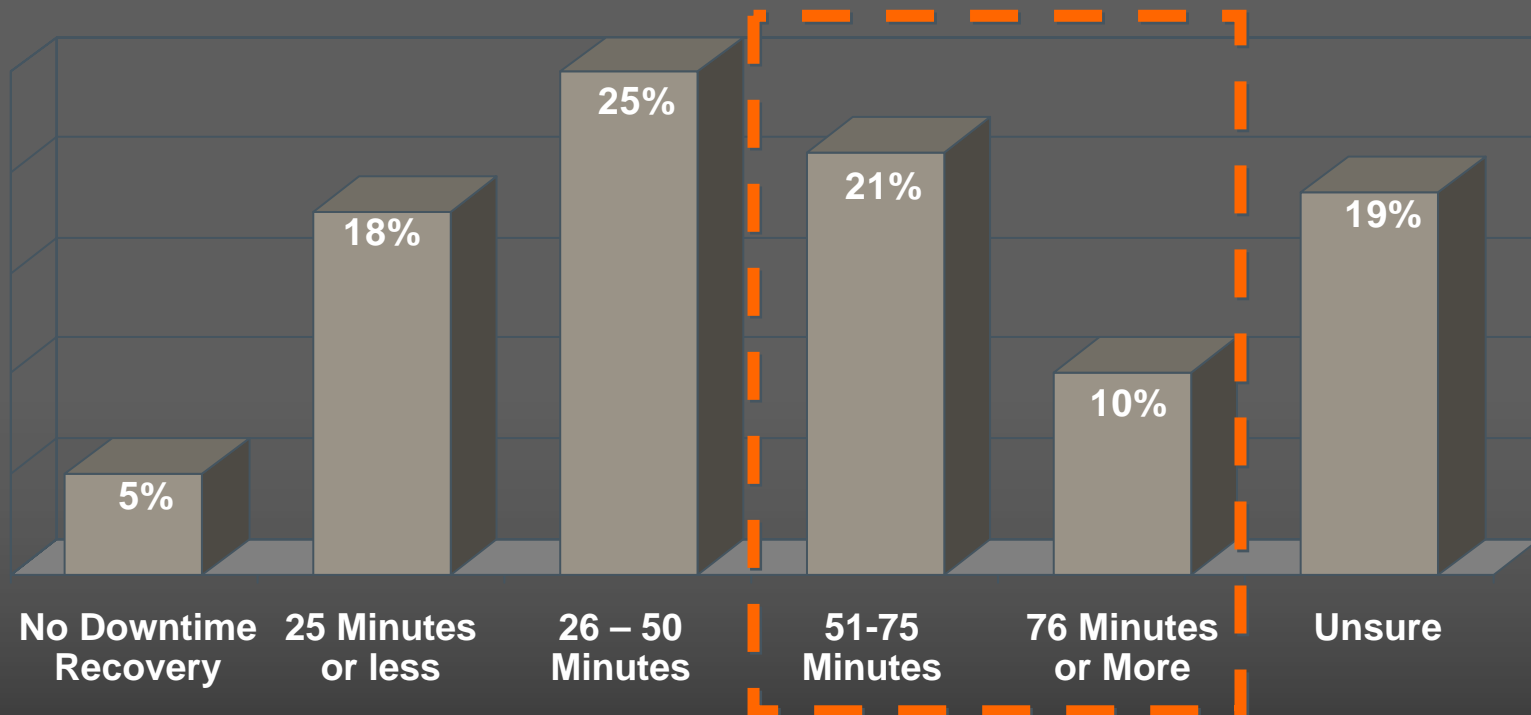


Key rising healthcare mobility solutions utilizing bar code technologies include patient ID, medication administration and charge capture.

Productivity Gains – Witnessed by Healthcare Mobile Workers



Q: “How much downtime (minutes per day) do you recover during your working day because of your usage of mobile devices and wireless technologies?”



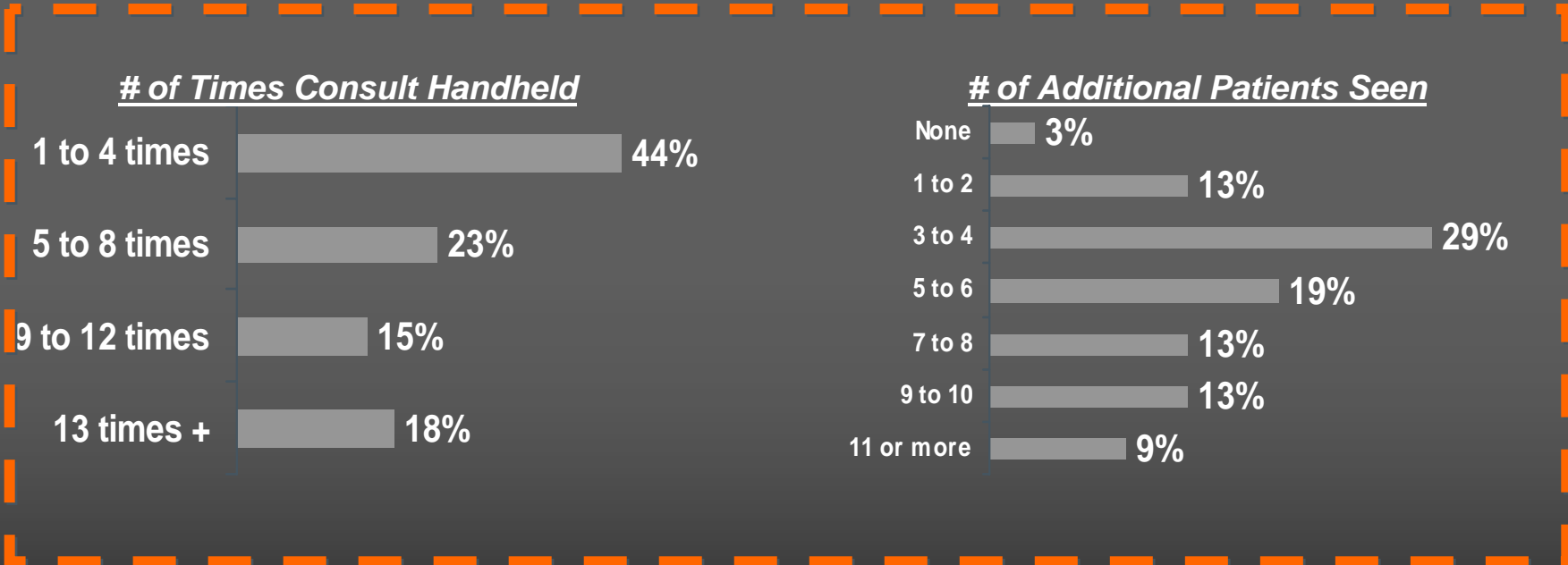
31% of surveyed healthcare mobile workers are able to recover at least 50 minutes per day due to the utilization of enterprise mobility solutions.

Physicians Consult Handhelds Often And Recover Significant Time



Q: “How often do you consult your handheld mobile computing device in a normal day for your work related activities?”

Q: “How many more patients does the handheld mobile computing device allow you to see on a daily basis?”
(Only those respondents whom cited improvements)



Physicians consult handhelds an average of 5.4 times a day and see an additional 3.8 patients per day.

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- **Mobility continues to rise in importance in healthcare**
- **Mobility is viewed as key error-proofing tool**
- **Key investment drivers include medication administration, patient monitoring, records/document management and drug delivery**
- **Healthcare mobile workers, physicians and nurses have realized immediate benefits and productivity gains due to the utilization of mobile technologies and solutions**

Thank You

