

**STATE COMMISSION ON PATIENT SAFETY
ROUND ONE RECOMMENDATIONS
APRIL 28, 2005**

Category: Setting Performance Standards and Expectations

Code: EdP (13) – The submitted testimony recommends development and implementation of curricula to educate health care professionals and other health care organization (HCO) personnel in patient safety topics and in the implementation of patient safety programs within HCOs.

Recommendation #: C.13.1¹

The State of Michigan, Michigan health care organizations, Michigan professional associations, and Michigan health care educational institutions should develop collaborative relationships with each other and with non-health care disciplines that can bring relevant knowledge to patient safety issues to develop and implement interventions to improve the patient safety knowledge and skills of all levels of health care providers in all health care service delivery situations in the State.

C.13.1.1²

The State of Michigan should work collaboratively with and provide a forum for all MI organizations involved in the education of health care practitioners and/or the delivery of health care services (e.g., academic institutions, health care service organizations of all types, professional associations, and employee unions), safety and other experts in areas relevant to safety interventions³, frontline practitioners, accrediting agencies, and consumers to develop:

- a) Consensus regarding patient safety core competencies required for practitioner licensure or certification and for those who serve on health care facility boards or are employed in a state regulatory capacity;*
- b) Standardization as appropriate across curricula⁴; and*
- c) Education modules for both academic and continuing education programs that emphasize a science-based approach to preventing health care errors and assure core competencies for all levels of care providers.*

Three general areas are represented in the topics recommended to the above forum for consideration: 1) clinical practice-related topics for specific service providers (generally those at the “sharp” – or patient interactive - end of the system), 2) foundational topics for a systems approach / culture shift in patient safety, and 3) curriculum development topics.

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Clinical practice-related topics:

- *Education of direct care providers on practices to prevent infection, including education about management and control of MRSA to providers, day care centers, and adult living facilities*
- *Medication information and warnings, e.g., continuing education and examination of physicians regarding new medications; warnings about post-polio reactions to pharmaceuticals included in training*
- *Standardization and requirements for training for front-line mental health workers*
- *Training for Certified Nurse Assistants in Nursing Homes*
- *Enhanced and increased clinical education for nursing students*
- *Mandatory patient safety training as part of physician and nursing education*
- *Education about peer review process for nursing and physician staff (i.e., what should be reported, how it should be reported, the effect or what's done with the report)*
- *Radiation safety training for all physicians overseeing the use of ionizing radiation*

Systems approach / culture shift in patient safety topics:

- *Introduction to error analysis (e.g., root cause analysis)*
- *Introduction to prospective process analysis for safety improvement, e.g., failure mode and effects analysis⁵, Six Sigma approach⁶*
- *Introduction to the challenges of practicing in technically complex environments*
- *Awareness of the intrinsic dangerousness of health care systems*
- *Education of all health care team members to the idea that part of what we do is educate and help train new people in our professions and the health care industry*
- *Human factors theory and communication techniques*
- *Training in interdisciplinary teamwork, e.g., crew resource management⁷*
- *Strategies for managing uncertainty⁸*
- *Systems-based approaches to safety*
- *Promotion of patient-centered care⁹, including the role of health literacy and cultural competence in patient safety*
- *Evidence-based practice^{10,11}*
- *Introduction to informatics¹²*

Curriculum development topics:

- *Use of simulation and simulators as means to improve patient safety and reduce medical errors*
- *Development of a patient safety issue priority index relevant to each aspect of care in the clinical continuum and identification of practitioner types involved in the priority index as a basis for curricula development*

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C.13.1.2¹³

Health care organizations in Michigan should:

Develop Skills:

- Provide training in the use of high tech tools for patient safety
- Provide staff training on safe patient transfer techniques with an active role played by occupational therapy and physical therapy

Develop Patient Safety Culture:¹⁴

- Require patient safety training as part of an annual staff competency program
- Educate all health care team members to the idea that part of what we do is educate and help train new people in our professions and the health care industry
- Assist in over-turning the long tradition of punitive response to clinical errors and adverse outcomes through education.

C.13.1.3¹⁵

Health care professional associations in Michigan should:

Develop Patient Safety Culture:

- View patient safety as an ongoing educational process that runs from the home, to work, to hospitals, to care facilities, and back home again
- Educate all health care team members to the idea that part of what we do is educate and help train new people in our professions and the health care industry
- Serve as advocates for patient safety efforts through the:
 - Communication of the importance of patient safety training as part of professional education to their membership and key opinion leaders
 - Communication of patient safety-related standards, values, and policy statements to membership and key opinion leaders through conferences and publications¹⁶
 - Education and dissemination of best practices within the industry¹⁷

C.13.1.4¹⁸

Health care practitioner educational institutions in Michigan should:

Develop Patient Safety Culture:

- Require patient safety courses and training as a basic curriculum requirement prior to graduation¹⁹
- Teach students how to communicate with their patients in language the patients understand so that patients and caregivers can participate in the care process and act as a final checkpoint to avoid a potential misadventure.

Rationale:

Health care is “an incredibly complex risk management task and its only getting more complicated as things progress”.²⁰ Many factors contribute to the unacceptably high numbers of adverse events and near misses that occur in Michigan. The failure to incorporate known safety practices into the everyday world of health care is one important factor. This failure can be partially met by incorporating these practices into

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the academic and continuing education curricula of MI health care professionals. However, sustained improvement *when we know what to do* and new improvements in other areas of challenge will require: a) change in the culture of health care; b) new knowledge, skills, and technology to support new methods of practice and management, and c) multi-strategy, inter-disciplinary, collaborative approaches that engage everyone (including the consumer of health care services).

Evidence and/or information on comparable initiatives being carried out in other states:

Patient Safety Focused Reports and Journal Articles:

The IOM report titled *Crossing the Quality Chasm (2001)*, called for, within Recommendation #12, a “multidisciplinary summit of leaders within the health professions to be held to discuss and develop strategies for 1) restructuring clinical education to be consistent with the principles of the 21st century health system throughout the continuum of undergraduate, graduate, and continuing education for medical, nursing, and other professional training programs; and 2) assessing the implications of these changes for provider credentialing programs, funding, and sponsorship of education programs for health professionals.”²¹

Five core competencies for all clinicians (regardless of discipline) came out of this Health Professions Education Summit that was convened in June 2002²²:

- Provide patient-centered care
- Work in inter-disciplinary teams
- Employ evidence-based practice
- Apply quality improvement
- Utilize informatics

While these competencies were developed to address the totality of health care challenges in the 21st century, they are fully applicable to improving patient safety.

In its 2005 white paper²³, JCAHO specifically highlights the importance of team training and of involving consumers as active members of the health care team. In particular, the report cites evidence that team approaches in front-line clinical units lead to superior outcomes, cost-effective care, high value for patient safety, as well as positive and attractive working environments.²⁴ To create a culture that values team-based care, JCAHO calls for involving future health care professionals as early as possible in the educational process and then continuously reinforcing it in practice. There does not, however, appear to be much movement to incorporate teamwork training or other patient safety-related knowledge and skills in medical and nursing education.^{25,26}

The health care professions must also guard against developing the mentality of feeling that they must or can do everything themselves in patient safety.²⁷ Ongoing collaboration by colleges of medicine, nursing, and pharmacy with safety experts from many disciplines can foster creativity, innovation, and new thinking.

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State Patient Safety Initiatives

The State of Missouri recommended the formation of a broad-based education coalition within its proposed Missouri Center for Patient Safety to act as a “champion” - providing leadership, helping assess the needs of schools and students, providing technical assistance on curriculum design, working with accreditation agencies on curriculum standards, advocating for minimum continuing education requirements for licensees, and stressing the need for better communication training for health care professionals.

This coalition is to also provide leadership in improving professional-patient and professional-professional communications as well as in addressing the rapidly growing challenges of bridging the communication gap with minority communities.

The Missouri Commission on Patient Safety identified specific recommendations with associated sub-recommendations for:

- *Curriculum development*: The Missouri Center for Patient Safety’s educational coalition should work with accreditation agencies responsible for establishing health care professionals’ education requirements to incorporate key patient safety concepts into the curricula.
- *Continuing education*: The commission recommends that the education coalition promote patient safety competency of health care professionals through continuing education activities.
- *Communications*: The commission recommends that the education coalition promote improved communication among health care professionals and with patients at all levels of health care delivery.²⁸

The Maryland Patient Safety Center facilitates education activities and collaborative workshops for providers to share information, best practices, lessons learned and to implement system changes. Plans call for Collaborative Patient Safety Teams to receive coaching, tools, and measurement strategies to improve care and track progress, then work through interventions shown to impact quality and safety of care through the Maryland Patient Safety Collaborative Workspace. In addition, no or low cost workshops are offered each month, e.g., Leadership Issues in Clinical IT, Root Cause Analysis, Failure Mode and Effects Analysis.²⁹

Other Patient Safety Centers: Massachusetts plans to offer education programs directly, including an annual patient safety symposium, and to support many other educational activities organized by the Massachusetts Coalition for the Prevention of Medical Errors. Pennsylvania issues quarterly newsletters with in-depth clinical analysis from its reporting system and will facilitate conferences and training programs that build on the reporting system’s internal analytical tools. New York is working with medical colleges to incorporate patient safety training into residency programs. The center is also conducting an annual training program on antibiotic prescribing and will issue a newsletter on the topic. Some centers are exploring partnerships with Quality Improvement Organizations for provider education.³⁰

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Addressing Specific Patient Safety Concerns through Education

The trends in JCAHO statistics on patient falls, infection-related events, and medication errors (1995-2004) both support the importance of these errors in health care organizations and suggest that education is an important intervention. While multiple factors can be at play, root cause analysis for these areas showed orientation/training played the major role in falls, infections, and medication errors (in almost 80% of cases for falls and almost 60% of cases for infection-related events and medication errors). Communication played a role in more than 60% of falls and medication errors. Root cause analysis for all reported sentinel events indicates that communication was a factor in around 65% of events and orientation/training in around 55%.³¹

Cultural Competence and Health Literacy

Nearly 90% of physicians in Michigan are either Caucasian or Asian-Pacific Islander (primarily Eastern Indian). Only 5% of physicians are African-American even though this is the largest underserved ethnic group in the State. This means that the majority of physicians providing their care may not look or sound like them. These physicians (and other health care staff) may have limited knowledge of African-American health habits or health seeking behaviors. Ultimately, because of these cross-cultural dyads, effective patient-provider communication may be limited.³² Additionally, in a health care system in which scientific advances and market forces place greater technical and self-management demands on patients, poor health literacy may be a particularly important barrier to chronic disease care and ongoing management.^{33, 34}

While the IOM states that many strategies must be undertaken in conjunction with training and educational strategies to eliminate racial and ethnic disparities in health, research to date has demonstrated that training is effective in improving provider knowledge of cultural and behavioral aspects of health care and in building effective communication strategies.³⁵ MPRO is a resource for the rest of Michigan in addressing the issues of health care practitioner cultural competency and consumer health literacy. Core curriculum guidelines are available for culturally sensitive and competent health care.³⁶

Unique Advantage of a Collaborative Approach

The unique advantage of using a collaborative approach to address a complex issue such as patient safety is the power to combine the perspectives, resources, and skills of a group of people and organizations – to create synergy. A successful inter-organizational collaborative relationship will:

- Generate creative, comprehensive, practical, and transformative thinking
- Strengthen action by bringing together partners with similar strengths and technologies and partners with different strengths and technologies to allow a multi-faceted comprehensive approach to a complex problem
- Provide a mechanism for reaching out and engaging the greater community in a way that can strengthen even further the thinking and increase the resources, skills, and support available to work on the problem of concern.³⁷

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The state alignment of professional societies and organizations [through providing a forum as in Recommendation C.13.1.1] would serve to enhance interdisciplinary education and collaboration; accelerate process improvements; share competencies; set common standards. This coordination would minimize duplicative efforts, ensure better use of limited resources, and assist all organizations in trying to achieve the same goal.³⁸

The following pros and barriers were primarily derived from the Health Professions Education Summit report.³⁹

Pros:

- The time may be right to reform the content, skills and values taught to students.
- Skilled and knowledgeable personnel are needed to bridge the gap between what is known to be good quality care and what currently exists.
- Health care employers and recent graduates cite gaps between the way health professionals are prepared and what they are called upon to do in practice.
- Training on patient safety practices early in careers can help shape future clinician and administrator views of patient safety as a core competency.
- Standardization of patient safety curricula across the State may result in a consistent and cohesive approach to patient safety issues in the State.
- Adoption of a multi-disciplinary, collaborative approach like this will bring creative, innovative, and new (outside-the-box) thinking into Michigan's discussions of patient safety.
- Adoption of something like this will bring clinical practice in MI into a more "cutting-edge venue."
- The State can be a neutral convener for the various stakeholders in patient safety discussions.

Barriers:

- Reform of health professions education can be slow and difficult to accomplish. (Education often occurs in separately housed professional schools and separate clinical areas governed by separate deans, directors and department chairs. There are entrenched beliefs about what needs to be taught and how although very little is evidence-based.)
- Educating the service sector will take busy short-staffed professionals away from the bedside and as it stands, there are too few nurses to provide basic patient care.
- This won't be straightforward endeavor – there's no Gold Standard as it relates to content and curriculum and in many instances, the research used to establish an evidence-basis is controversial and emerging.
- There is limited focus on teaching (compared to research and clinical practice) in academic institutions.
- This will be logistically challenging both in terms of great geographical spread of potential participants and in getting the various health care professionals to work

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together (or alternatively to work with multiple groups separately on the task). Also, there currently is no coordinated oversight across the continuum of education and fragmented responsibilities for undergraduate and graduate education.

- It may be difficult to get buy in from all parties unless the State makes it attractive to various stakeholders.
- It may be costly to implement since requires the development and implementation of new patient safety courses.
- Lack of funding to revamp curricula
- As a regulatory and licensing body, the State may not be perceived as a neutral convener.

Additional Comment/Concerns:

- The costs and sources of revenue available for provider education may influence program design.⁴⁰
- Provider education alone will not address many patient safety problems.⁴¹
- Provider education tends to focus primarily on clinical process improvements rather than creating safety cultures. However, provider education can create leadership to stimulate environmental change.⁴²
- Sustaining a collaborative approach is not easy. It requires resources and nurturing. Collaboration between organizations is generally not the familiar way of doing things and may mean finding a way to work with competitors. The organizations need to see “what’s in it for them”. When participation is voluntary and participants’ own institutional goals compete with participation on an external collaborative, it is likely that the collaborative will lose and be unable to consistently sustain its work over time.⁴³
- How will you get all the educators and providers to comply – will there be a carrot or will there be a stick or a combination of both? Will it require legislation or can the incentives be developed using administrative tools only? Will this training be tied into licensure or accreditation or payments?
- As for the academic institutions, they already feel that there’s too little time to cover the basic and essential material especially for entry-level students. Where will the faculty come from to teach this material?
- According to the IOM report titled the “Quality Chasm, “the system must be designed to provide care that achieves six national quality aims; the first item listed is safety (the others are effectiveness, patient-centeredness, timeliness, efficiency and equity”). Blaming providers or asking them to just try harder is not enough. They must be “educated, trained and regulated differently”.⁴⁴

Implementation Steps:

- Make patient safety a priority issue on the agendas of MI (and national) health care profession associations and health care academic institutions leaders.
- Determine interest among potential participants in collaborating to address the complex issue of developing and implementing interventions to improve the

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patient safety knowledge and skills of all levels of health care providers in all health care service delivery situations in the State.

- Develop a common vision across the professions centered on commitment to meeting the patient's needs as envisioned in the *Quality Chasm*.⁴⁵
- Review the IOM report from the *Committee on the Health Professions Education Summit* and identify strategies applicable to Michigan (the report identified five cross-cutting strategies and compiled a list of strategies and actions (contained in Appendix C of the IOM report).
- Track work done in follow-up to the summit to determine if action has occurred in any states.
- Work with MI health care professional associations, health education institutions, and health care organizations to assess health care professionals' competency in patient safety knowledge and skills.

Cost: TBD

Implementation Target Date: TBD

Grade: TBD

Endnotes

¹ A summary table is available indicating the testimony-based recommendations reflected in each category below. If recommendations originated in or are specifically supported by literature/initiatives, the reference is cited.

² Compiled from 22/33 testimony recommendations coded 13 (Education of Professionals & other HCO Personnel) or other relevant codes (one each: 30 – Consumer/Patient Advocate; 20 – Patient Include; 15 Collaboration) plus 7 initiative/journal or testimony non-recommendation references (see endnotes).

³ Wears, R. L., Perry, S. J., & Sutcliffe, K. M. (2005). The medicalization of patient safety. *Journal of Patient Safety*, 1, 4-6.

⁴ Shojania, K. G., Duncan, B. W., McDonald, K. M., & Wachter, R. M. (Eds). (2001). *Making health care safer: A critical analysis of patient safety practices*. (AHRQ Pub No. 01-EO58) Retrieved 4.17.05 from <http://www.ahrq.gov/clinic/ptsafety/>

⁵ Senders, J. W. (1994). Medical devices, medical errors, and medical accidents. In M. S. Bogner (Ed.), *Human Error in Medicine* (pp. 159-177). Hillsdale, NJ: Erlbaum.

⁶ Halback, J. L. & Sullivan, L. (2003). *A curriculum guide for teaching medical students and family practice residents – 3rd edition* [Electronic version]. (Available from the Department of Family Medicine, New York Medical College, Valhalla, NY or <http://www.nymc.edu/fammed/medicalerrors.pdf>)

⁷ Wachter, R. M. (2004, November 30). The end of the beginning: Patient safety five years after "To Err is Human". *Health Affairs – Web Exclusive*, W4-534-W4-545.

⁸ Halback & Sullivan

⁹ Greiner, A. C. & Knebel E. (Eds) (2003). *Health professions education: A bridge to quality*. Washington D.C.: National Academy Press. Retrieved 4.17.05 from <http://www.nap.edu/openbook/0309087236/html/>

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¹⁰ Greiner & Knebel

¹¹ Testimony 606-W [W 226-234]

¹² Greiner & Knebel

¹³ Compiled from 5/33 testimony recommendations coded 13 (Education of Professionals & other HCO Personnel) or other relevant codes (one each: 30 – Consumer/Patient Advocate; 20 – Patient Include; 15 Collaboration) plus 1 initiative/journal or testimony non-recommendation reference (see endnotes).

¹⁴ Wong, J. & Beglaryan, H. (2004) *Strategies for hospitals to improve patient safety: A review of the literature*. Ontario, Canada: The Change Foundation. Retrieved 4.17.05 from http://www.caphc.org/patient_safety_docs/patient_safety_2004.pdf

¹⁵ Compiled from 4/33 testimony recommendations coded 13 (Education of Professionals & other HCO Personnel) or other relevant codes (one each: 30 – Consumer/Patient Advocate; 20 – Patient Include; 15 Collaboration) plus 2 initiative/journal or testimony non-recommendation references (see endnotes).

¹⁶ Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds). (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, D.C: National Academy Press.

¹⁷ Wong & Beglaryan

¹⁸ Compiled from 2/33 testimony recommendations coded 13 (Education of Professionals & other HCO Personnel) or other relevant codes (one each: 30 – Consumer/Patient Advocate; 20 – Patient Include; 15 Collaboration) plus 1 initiative/journal or testimony non-recommendation reference (see endnotes).

¹⁹ Wong & Beglaryan

²⁰ Testimony 405-O [O 208-213]

²¹ Kohn, Corrigan, & Donaldson

²² Greiner, & Knebel

²³ Joint Commission on Accreditation of Health care Organizations. (2005). *Health care at the crossroads: Strategies for improving the medical liability system and preventing medical injury, executive summary*. Retrieved April 18, 2005 from http://www.jcaho.org/about+us/public+policy+initiatives/medical_liability.pdf

²⁴ Nelson, E. C., Batalden, P. B., et al. (2003, September). Microsystems in health care: Part 1. Learning from high-performing front-line clinical units. *The Joint Commission Journal on Quality Improvement*, 472-493.

²⁵ While Wachter drew specific attention to the potential for teamwork and simulation training in medical education to improve performance and safety, he also noted that few medical or nursing schools include the use of simulators or teamwork training in their curricula. Wachter

²⁶ The New York Medical College, Department of Family Medicine developed *Medical Errors and Patient Safety: A Curriculum Guide for Teaching Medical Students and Family Practice Residents* based on faculty experience in teaching these groups and on a review of the literature. In their preface, Halback and Sullivan note that they have not heard about many new curricula in this area for medical students and residents and that the gap between hospital patient safety activities and medical education about them seems to be growing. They make a call for a more formal and organized strategy for incorporating teaching about patient safety and medical errors into medical education. Halback & Sullivan

²⁷ Wears, Perry, & Sutcliffe

²⁸ Missouri Commission on Patient Safety. (2004, July). *Report presented to Governor Bob Holden*. Retrieved 4.13.05. from

<http://insurance.mo.gov/aboutMDI/issues/patsafety/PatientSafety.pdf>

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²⁹ The Maryland Patient Safety Center. Retrieved 4.11.05 from

<http://www.marylandpatientsafety.org/>

³⁰ Rosenthal, J. & Booth, M. (2004, October). *Flood Tide Forum: State Patient Safety Centers: A New Approach to Promote Patient Safety*. National Academy for State Health Policy. Retrieved 3.28.05 from http://www.nashp.org/Files/final_web_report_11.01.04.pdf

³¹ JCAHO. Sentinel Event Statistics - December 31, 2004. Retrieved 4.19.05 from <http://www.jcaho.org/accredited+organizations/ambulatory+care/sentinel+events/sentinel+event+statistics.htm>

³² Testimony 904-B [W 249-261]

³³ Testimony 904-B [W 334-340]

³⁴ A growing body of research demonstrates that poor health literacy is independently associated with poor self-rated health. Poor health literacy (the degree to which individuals can obtain, process, and understand the basic health information and services they need to make appropriate health decisions) is more common in patients who have low educational attainment and among immigrants, older patients, and racial and ethnic minorities. For example: Schillinger, D. et al. (2002). Association of health literacy with diabetes outcomes. *Journal of the American Medical Association*, 288, 475-482 and Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs. Health literacy: Report of the Council on Scientific Affairs. (1999) *Journal of the American Medical Association*, 281, 552-557. For all patients, the use of medical jargon and other language not comprehended by them leads to significant potential and actual adverse medical occurrences, especially when patients are reticent to tell their care providers that they do not understand. Testimony 204-B [W 110-115; W 45-47]

³⁵ Testimony 904-B [W 269-271]

³⁶ Like, R. C., Steiner, R. P., & Rubel, A. J. (1996). Recommended core curriculum guidelines on culturally sensitive and competent health care. *Family Medicine*, 28, 291-297. Retrieved 4.19.05 from <http://www.stfm.org/corep.html>

³⁷ Lasker, R. D., Weiss, E. S., & Miller, R. (2001). Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *The Milbank Quarterly*, 79, 179-205.

³⁸ Testimony 212-W [W 181-186]

³⁹ Greiner & Knebel

⁴⁰ Rosenthal & Booth

⁴¹ Rosenthal & Booth

⁴² Rosenthal & Booth

⁴³ Alexander, J. A., Weiner, B. J., Metzger, M. E., Shortell, S. M., Bazzoli, G. J., Hasnain-Wynia, R., et al. (2003). Sustainability of collaborative capacity in community health partnerships [Supplement]. *Medical Care Research and Review*, 60(4), 130S-160S.

⁴⁴ Greiner, & Knebel

⁴⁵ In order to move to educating all health professionals to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches and informatics. Testimony 212-W [W 132-136].