A National Platform For Quality Improvement In Child Sexual Abuse: Planning, Pitfalls And Performance

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Disclosure slide

- Drs. Frasier and Starling are compensated reviewers for myCaserveiw and myQIportal

Objectives

- This workshop will discuss the development of two national peer review platforms
- Participants will:
  - Recognize the purpose of peer review in child sexual abuse evaluations
  - Understand how data gathered from QI projects can improve clinical practice
  - Identify areas of quality improvement in child sexual abuse evaluations for future study

Quality concepts

Quality Improvement

- Quality improvement in health care is a process for producing excellent outcomes using evidence-based medicine and best clinical skills to meet the needs and expectations of consumers
- Core activities of quality improvement
  - Seek understanding of the sources of systematic as well as unwanted and unnecessary variation
  - Implement cost effective strategies to reduce unwanted variation
  - Produce organization-wide knowledge on structured approaches to change process and improve outcomes
- Application of QI principles is important in advancing and
- improving practice

Quality Improvement

- Understanding variation and raising outcomes to a higher level requires thinking from a systems point of view.
- Effective and efficient implementation of continuous improvement requires data-driven methods and ongoing evaluation.
- Shared knowledge re-quires continuous learning
- The focus on implementation in everyday practice is the single most important factor that distinguishes quality improvement from traditional evaluative research
- The goal of QI research is to produce generalizable knowledge for use in other environments

Quality Improvement

- Quality Improvement: the ability to develop, test, and implement changes essential for any individual, group, or organization that wants to continuously improve
- American Board of Pediatrics requires Performance in Practice for Maintenance of Certification- pediatricians must demonstrate competence in systematic measurement and improvement in patient care

PDSA cycle of Quality Improvement

Research on the Diagnostic Skills of Medical Providers

- 32% of residents misdiagnosed a normal colposcopic examination as abnormal
- 50% of pediatric chief residents considered their training in sexual abuse inadequate
- 40% of pediatric residency programs did not adequately prepare residents to examine children with abuse complaints

Starling et al. 2009; Dubow et al. 2005; Narayan et al, 2006

Research on the Diagnostic Skills of Medical Providers

- 81.5% of PCPs stated that it would be best for children if the medical aspects of suspected sexual abuse were evaluated by a subspecialist
- CAPs have "greater knowledge and competence in interpreting medical and laboratory findings in children with child sexual abuse" when compared with pediatric SANEs and advanced practice nurses in the field

Lane and Dubowitz, 2009; Adams, Starling et al, 2012

Research on the Diagnostic Skills of Medical Providers

- 40% SANEs utilized by CACs as primary medical providers receive supervision from professionals who DO NOT have child abuse medical evaluation expertise and/or training

Lack of training correlates with overdiagnosis

ORIGINAL ARTICLE

Anogenital injuries in childhood sexual abuse victims treated in a pediatric Forensic Nurse Examiner (FNE) program

Rebecca Campbell, PhD[1], Debra Patterson, PhD[2], Emily Dworkin, BA[3], and Renae Diegel, RN[4]

Journal of Forensic Nursing 6 (2010) 188–195

Pergamon

Child Abuse & Neglect

Child Abuse & Neglect 26 (2002) 1235–1242

Genital examinations for alleged sexual abuse of prepubertal girls: findings by pediatric emergency medicine physicians compared with child abuse trained physicians

Kathi L. Makoroff[a,*], Jamie L. Brauley[b], Ann M. Brandner[b], Patricia A. Myers[b], Robert A. Shapiro[a]

Training, experience and review matter

Child Abuse & Neglect 36 (2012) 383–392

Contents lists available at SciVerse ScienceDirect

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Joyce A. Adams[a,*], Suzanne P. Starling[b], Lori D. Frasier[c], Vincent J. Palusci[d], Robert Allan Shapiro[e], Martin A. Finkel[f], Ann S. Botash[g]

Tendency to over-call without specific training

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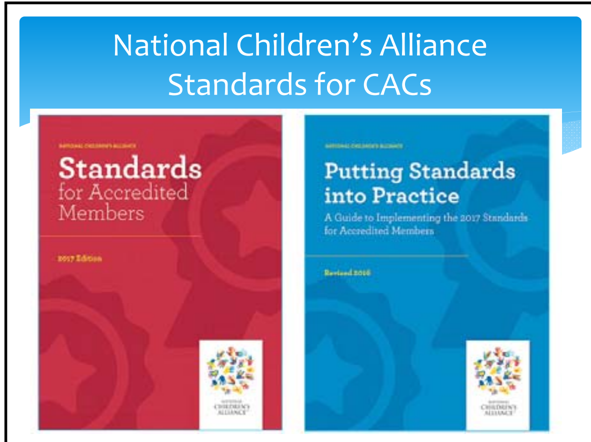
National Children's Alliance Standards for CACs



Standards

- To ensure that all children across the U.S. who are served by Children's Advocacy Centers receive consistent, evidence-based interventions that help them heal.
- NCA and its Accreditation Committee conduct these regular reviews of the current accreditation standards to ensure that the Standards take into consideration the newest evidence-based practices in the field, and also convey clear and concise uniform thresholds across each standard.

Continuous Quality Improvement (CQI) for the medical component of the CAC

- The medical provider must be familiar and up-to-date with published research studies on findings in abused and non-abused children, sexual transmission of infections in children, and current medical guidelines and recommendations from national professional organizations such as the American Academy of Pediatrics Committee on Child Abuse and Neglect, American Professional Society on the Abuse of Children, and the Centers for Disease Control and Prevention. Accuracy in interpretation of examination findings is vitally important to the MDT.

Continuous Quality Improvement (CQI) for the medical component of the CAC

* The medical provider must provide documentation of participation in Continuous Quality Improvement activities including continuing education and expert review of positive findings with an "advanced medical consultant" in order to stay current in the field of child sexual abuse.

Revision of Standards for Accreditation by the National Children's Alliance

* NCA Standards revision released in June, 2015. Become the "graded" standard in 2017.

National Children's Alliance
Standards for Accredited Members

The purpose of Children's Advocacy Centers is to provide a comprehensive, culturally competent, multidisciplinary team response to allegations of child abuse in a dedicated, child-friendly setting. A child appropriate/child-friendly setting and a multidisciplinary team are essential for accomplishment of the mission of Children's Advocacy Centers and for accredited membership in National Children's Alliance.

Documentation of medical findings by written record and photo-documentation

* Medical record should state significance of findings and treatment plan.
* "Diagnostic quality" photo-documentation of the ano-genital findings (still or video) should be obtained.
  * Participate in CQI review
  * Keep child from having repeat exam for consult, second opinion or review by defense.

Continuous Quality Improvement: Exam Review

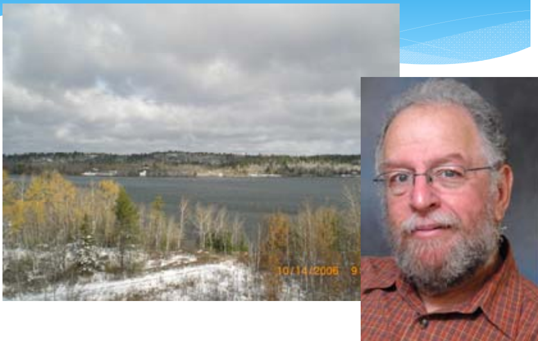
Medical professionals providing services to CAC clients must demonstrate, at a minimum, that 50% of all findings deemed abnormal or "diagnostic" of trauma from sexual abuse have undergone expert review by an advanced medical consultant.

While it is recommended that ALL examinations with findings that the medical provider deems are abnormal or "diagnostic" of trauma from sexual abuse be submitted for expert review, the **medical provider should be able to provide documentation of participation in expert review on at least 50 % of abnormal exams** for the purpose of CAC case tracking information that could be requested for review in the accreditation process.

History of the Guidelines and Best Practices

- Group of CAC physicians met in 2004 to discuss the revisions of the NCA Medical Standard outlining the minimum standards for medical providers
  - Recommended peer/expert review of medical cases in CACs
  - Intention: improve the quality of medical examinations in CACs
- A subset of this group developed a peer review mechanism for child sexual abuse

First Ely Meeting-Oct. 2006



We met to establish peer review standards

Ely, MN Meeting-2004 and 2006

- To meet as a group of experts in the field to develop a process for peer review and quality improvement
- To assist CACs anywhere to meet the NCA standards for peer review in a cost effective manner

Development of a national peer review system

- Technology designed to link clinical information with photodocumentation for peer review
- Devised to make child sexual abuse expertise available to all CAC medical providers in US
- Public-private partnership with MRCAC and VisualShare (now TeleCAM by Xifin)
- Anonymous and internet-based
- HIPAA and SAS70 compliant to ensure highest standards for privacy and security

Adams Guidelines were chosen as the paradigm for review

- Only evidence based consensus guidelines available
- The need for a uniform approach to review
- Examiners and reviewers were clearly instructed to use the Guidelines
- The platform was developed with the Guidelines as the underlying approach
- The platform has been updated to reflect updates in the Guidelines and terminology

Choosing Reviewers-criteria

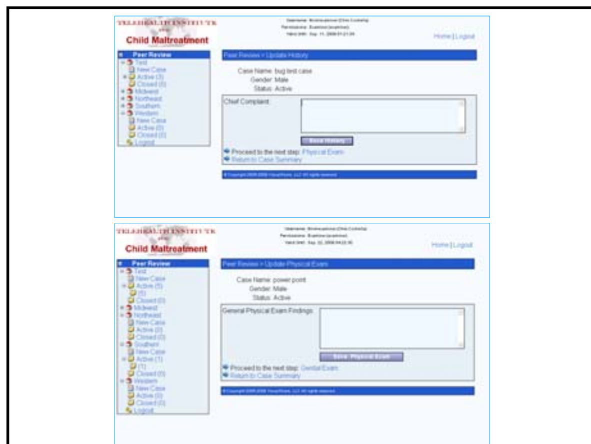
- Child Abuse Pediatricians or equivalent
- Initially not much training-the assumption was we practiced similarly
  - NOT TRUE
- Eventually we had to review and vet the experts who were reviewing the cases

Do Experts always agree?

- Inter-rater reliability in child sexual abuse diagnosis among expert reviewers. SP Starling, LD Frasier, K Jarvis, A McDonald - Child abuse & neglect, 2013
- 12 experts from existing peer review network each submitted 3 cases for review
- All 12 agreed in 15 of the cases that were clearly abnormal or clearly normal. More variability in cases that are less obvious.
- Most diagnostic variability was due to interpretation of the findings, not due to findings themselves.

Ethical issues in peer review

- Removing bias-we need to be anonymous
  - Reviewer blinded to the examiner and vice verse
  - Even location and region of the country are not known
- Reviewers were contracted to Children's Health Care
  - Call system was implemented
  - Periodic review of the process was undertaken



Northeast
Southern
Western
New Case
Active (0)
Closed (0)
Logout

Tanner Stage: 1

Technique:
- Colposcope
- Traction
- Swab
- Foley
- Water / Saline Wash
- Direct Visualization
- Handheld Magnification

Position:
- Supine-Frog leg
- Supine-Stirrups
- Supine-Knee chest
- Lateral dDubitus
- Prone-Knee chest

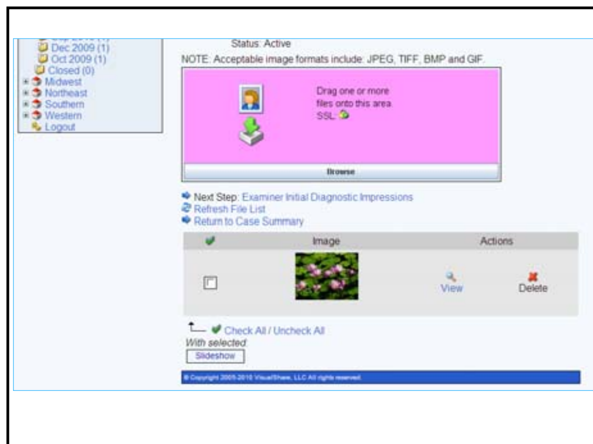
Hymen Type: Crescentic

Hymen: Normal Abnormal

Speculum: Yes No

Bimanual: Yes No

Genital Exam Findings (labia, vagina):
Include detailed description of findings



Home | Logout

Peer Review > Update Impression

Case Name: test case 2
Gender: Male
Status: Active

Explain you diagnostic impression of the exam findings in detail

Your Diagnostic Impression:
(Choose one)

- Normal variants or findings normally caused by other medical conditions
- Indeterminate findings for sexual abuse
- Findings diagnostic of trauma and/or sexual contact

Save Impression

Return to Case Summary

Example Review

Physical Exam Comment: Your exam is very thorough and I appreciate the inclusion of non-genital physical exam findings. Excellent documentation.

Genital Exam Comment: The pictures are of good quality. The inclusion of knee-chest was pivotal in this case and much appreciated. The hymen appeared in supine to have a notch or even a transection at the 5:30 position. But on knee chest views the hymen is clearly normal.

Anal Exam Comment: No anal photographs were provided for review. It appears to be a fistula with keratinized skin surrounding the opening and mucous membrane tissue at its base.

Other Comment: The documentation is great. The addition of the PMH and other historical elements is very helpful and provides a complete picture of this case. The magnification level and traction techniques are good. The photos are framed nicely. The use of knee chest is excellent. Keep up the good work.

Conclusion: Normal finding or variant - no evidence of trauma

Example Review

Genital Exam Comment: The only picture provided is of poor quality. It is shot from a very wide angle and shows no detail of the hymen. It also is of insufficient quality to be enlarged without becoming pixilated. The hymen cannot be visualized in the photo, because no traction is provided. It would be VERY unusual for there to be no hymenal tissue on the exam of a 5 year old girl, and clearly these photos do not demonstrate that. I would be very cautious in diagnosing the absence of hymenal tissue without adequate photographic proof.

Suggestions for examiner: In order to make this diagnosis and defend it in court (when necessary) your photos should adequately reflect your diagnosis. In such a case you should review the photos immediately to assure they are of good quality and if not, the photos can be re-shot while the child is still present in the office. In this case independent verification of your finding (such as in peer review) cannot be made and if this actually is a child abuse case the diagnosis likely would not stand up to scrutiny in court. I have 2 suggestions:

- Bring this child back and try again to get better photos.
- Consider a better camera. Make sure the images are centered, focused, and well lit. You would be better off with a handheld off-the-shelf point and shoot than with the system you have. For less than $300 you can get a great quality camera. For a little more you could convert to a videocamera setup and take quality video of exams. That same system also shoots stills which can be submitted for peer review. Good luck.

Preliminary Data from THICM

- 63 cases were reviewed
- 24% of cases submitted were false positives
  - Poor photodocumentation
  - Bias of child's history
  - Lack of education of medical providers
- No false negatives

Value of THICM Peer Review

- 68% of participants indicated that submitting cases to THICM peer review effectively increased their diagnostic skill base

"I was extremely thrilled to have someone review and mentor my findings. I appreciated the positive reinforcements as well as the tactful corrections of my interpretations"

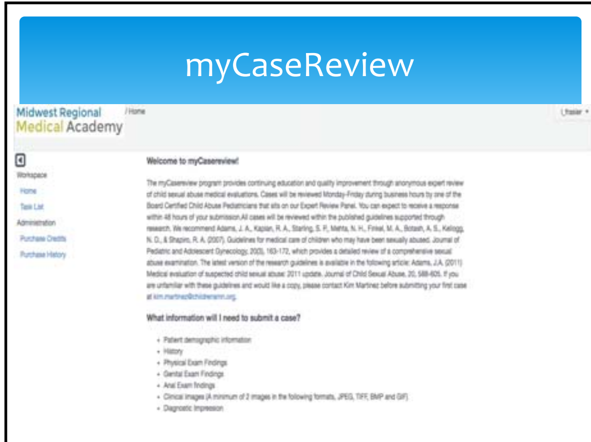
– THICM User

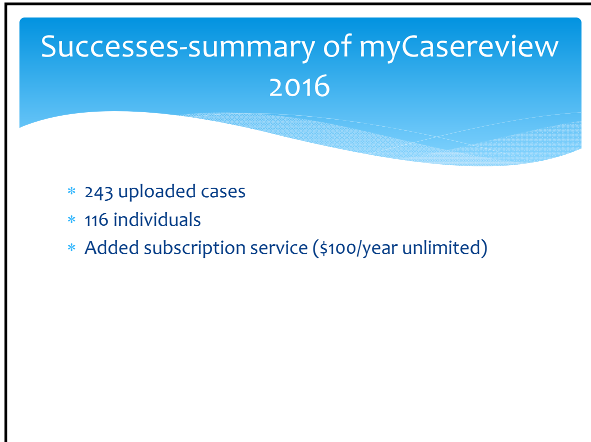
Other issues

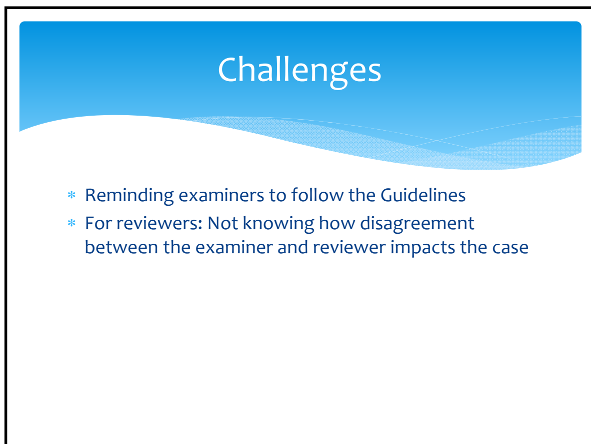
- What happens with one site that persists in overcalling?
- Should we inform the CAC director?
- Should we inform the examiner that there is a problem?
- What are our ethical duties to the patients?

Current status

- Now titled myCaseReview (New branding_
- Updated platform
- Increased reviewers
- Mon-Friday (not 7 days/week)


myCaseReview
Midwest Regional Medical Academy
/ Home
Workspace
Home
Task List
Administration
Purchase Credits
Purchase History
Welcome to myCasereview!
The myCasereview program provides continuing education and quality improvement through anonymous expert review of child sexual abuse medical evaluations. Cases will be reviewed Monday-Friday during business hours by one of the Board Certified Child Abuse Pediatricians that sits on our Expert Review Panel. You can expect to receive a response within 48 hours of your submission.All cases will be reviewed within the published guidelines supported through research. We recommend Adams, J. A., Kaplan, R. A., Starling, S. P., Mehta, N. H., Finkel, M. A., Botash, A. S., Kellogg, N. D., & Shapiro, R. A. (2007). Guidelines for medical care of children who may have been sexually abused. Journal of Pediatric and Adolescent Gynecology, 20(3), 163-172, which provides a detailed review of a comprehensive sexual abuse examination. The latest version of the research guidelines is available in the following article: Adams, J.A. (2011) Medical evaluation of suspected child sexual abuse: 2011 update. Journal of Child Sexual Abuse, 20, 588-605. If you are unfamiliar with these guidelines and would like a copy, please contact Kim Martinez before submitting your first case at kim.martinez@childrensmn.org.
What information will I need to submit a case?
Patient demographic information
History
Physical Exam Findings
Genital Exam Findings
Anal Exam findings
Clinical images (A minimum of 2 images in the following formats, JPEG, TIFF, BMP and GIF)
Diagnostic Impression


Successes-summary of myCasereview 2016
243 uploaded cases
116 individuals
Added subscription service ($100/year unlimited)


Challenges
Reminding examiners to follow the Guidelines
For reviewers: Not knowing how disagreement between the examiner and reviewer impacts the case

Lessons Learned

- Take it one step at a time
- Record and archive everything for later viewing
- Make it as easy as possible
- Have technical support on hand
- Begin small and think BIG

Continuing Efforts

- Quality Improvement Module-myQIportal
  - Hosted through Xifin and available to physicians for ABP MOC part 4 credit and continuing education
- Online Learning expansion
  - Online Pediatric SANE training
- Clinical Medical preceptorship
  - On site clinical training for medical providers

Development of a quality improvement initiative for Child Abuse Pediatrics

MOC At-A-Glance

Need 100 points total

✓Part 1: Professional Standing
Valid, unrestricted license

✓Part 2: Knowledge Self-Assessment
Earn at least 40 points from approved activities*

✓Part 3: Cognitive Expertise
Pass a secure exam every 10 years

✓Part 4: Performance In Practice
Earn at least 40 points from approved activities*

*Choose activities from either Part 2 or 4 to earn the additional 20 points you need to fulfill your 100 point requirement.

The American Board of Pediatrics

Measuring the 6 Core Competencies

Part 1 – Professional Standing
Patient care, Interpersonal & communication skills, Professionalism

Part 2 – Knowledge Assessment
Patient care, Medical knowledge, Practice-based learning & improvement, Systems-based practice

Part 3 – Cognitive Expertise
Medical knowledge

Part 4 – Performance In Practice
Patient care, Practice-based learning & improvement, Interpersonal & communication skills, Professionalism, Systems-based practice

4 - Part MOC Process

Professional Standing · Knowledge Assessment · Cognitive Expertise (secure exam) · Performance in Practice

Patient care	Medical knowledge
Interpersonal and communication skills	Practice-based learning and improvement
Professionalism	Systems-based practice

6 Physician Competencies

The American Board of Pediatrics

Part 4 MOC – Performance in Practice

40-point minimum per 5-year MOC cycle

Requirements for Part 4 :

✓**Option 1:** The Part 4 MOC requirement for Performance In Practice can be met by completing web-based Quality Improvement activities.

✓**Option 2:** Participate in an ongoing ABP-approved collaborative Quality Improvement project.

The American Board of Pediatrics

THE AMERICAN BOARD of PEDIATRICS

Improvement in Practice (Part 4) Options

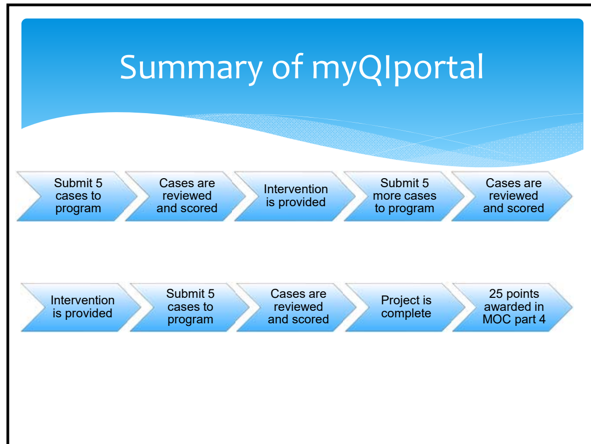
Below are the options to obtain Part 4 credits:

myQIportal

- This project was developed as a Maintenance of Certification (MOC) part 4 to confirm with the American Board of Pediatrics re-certification requirements. It was specially directed towards board certified child abuse Pediatricians.
- To assess and improve the accuracy of the documentation and medical diagnosis of child sexual abuse and improve the quality of photographic evidence

THE AMERICAN BOARD of PEDIATRICS

Improving documentation and diagnostic accuracy in child sexual abuse evaluations



Structure of the project

- ABP QI Project based on the THICM (now mycasereview) platform
- Participants would submit 5 consecutive cases for peer review (photos or video acceptable)
- The cases will be scored on a standardized scale as to the quality of documentation, accuracy of diagnosis and quality of photographs submitted

Image Quality Outcome Measure

		Points
Color-represents natural, expected skin tones	0	1
Brightness/contrast, delineation of shadows	0	1
Focus-sharpness, delineation of the findings	0	1
Composition, subject in field	0	1
Adequate representation of described finding	0	1

Score: __________

Excellent- 5 points
Acceptable- 3-4 points
Unacceptable- 0-2 points

Written Documentation Outcome Measure

Quality of Written Documentation

	Points	
Accurately describes all pertinent findings	0	1
Identifies all pertinent findings in photo	0	1
Accurately describes location of findings	0	1
Does not describe normal finding as abnormal	0	1

Score: ________

Acceptable- 4 points
Unacceptable- 0-3 points

Accuracy of Examination Interpretation

Accuracy of Examination Interpretation

	Points
Reviewer agrees with the interpretation of the findings	1
Reviewer disagrees with the interpretation of the findings	0
Reviewer cannot review the findings	0

Score: ______

Acceptable- 1 point
Unacceptable- 0 points

Structure of the program

The expert reviewer provides standardized feedback based on the score reviewed, addressing common diagnostic errors and assigns intervention modules over the course of several months

- A literature-based reading list to address specific diagnostic errors
- A reading list and/or other educational material on photodocumentation

Structure of the program

* Project is complete after 3 rounds
* At the successful completion of project participants get 25 points of Part 4 MOC credit

Current status of the program

* 30 clinicians have completed the myQIportal
* 6 enrolled and still uploading case sets
* 16 from the Legacy platform that completed program

* Available only to Pediatricians at this time
* $250 enrollment fee

Outcomes

A Standardized Peer Review Program Improves Assessment and Documentation of Child Sexual Abuse

Suzanne P. Starling, MDa, Lori Frasier, MDb, Kim Martinez, APRN, CNP, MPHc

Objective
The objective was to assess the impact of interventions associated with ongoing peer review on the quality of written and photo documentation in child sexual abuse cases.

Outcomes

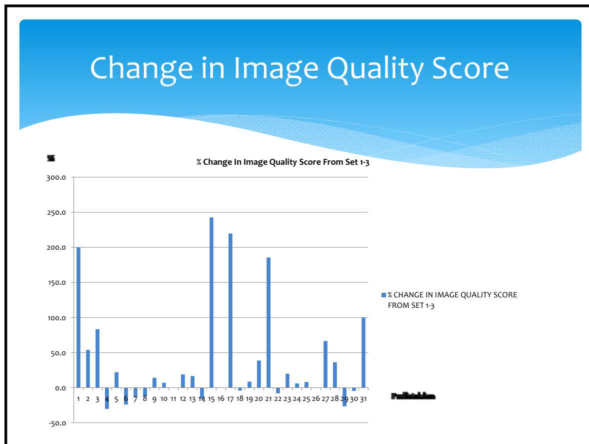
Results

- Thirty-one participants completed the program. A paired-t test analysis of the scores in all three measures, Image Quality, Quality of Written Documentation, and Accuracy of Exam Interpretation, showed a statistically significant improvement (p=0.01, 0.01, and 0.00).

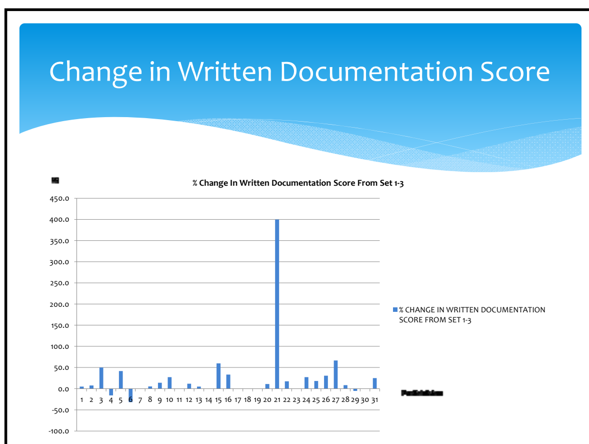
Conclusion

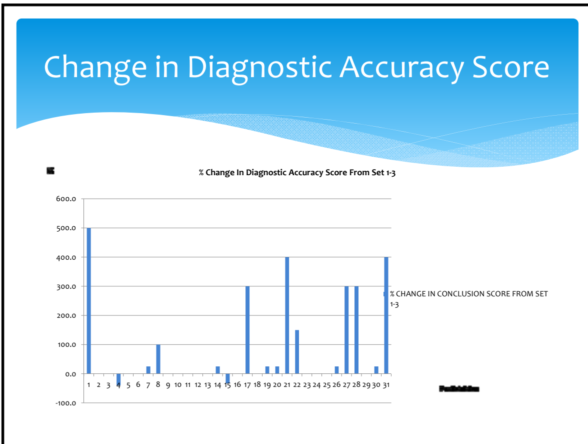
- Peer review with interventions customized to address quality issues resulted in overall improved quality of the assessment and documentation of child sexual abuse evaluations.

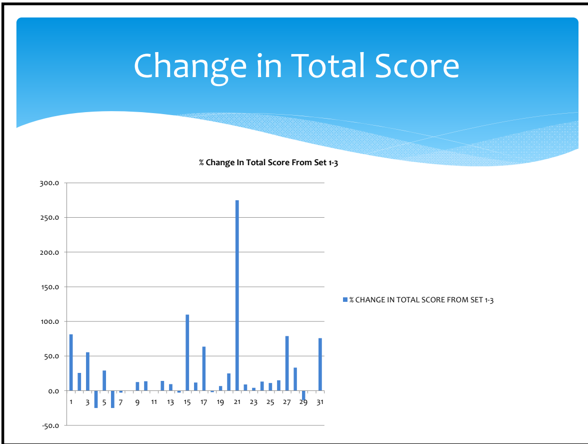
Change in Image Quality Score



Change in Written Documentation Score







Successes

* It works!

Challenges

- It's time consuming
  - For participants
  - For reviewers
- As reviewers are added they need to be vetted to make sure their reviews are:
  - Guidelines based
  - Helpful, collegial, and based upon the concepts of quality

Future challenges

- Physical abuse module is now available
- Wider reach of SA interventions is mandatory

Future directions

- Platform changes
- Additional reviewers
- Updating the process as we learn
- Mentoring?
- Training?

Summary

By improving their diagnostic practices, medical providers can improve the community response to child sexual abuse. Providing accurate assessments to the agencies involved in the protection of children and the prosecution of offenders will result in improved safety of children.

Reference articles

* Adams, Starling, Frasier, et al. Diagnostic accuracy in child sexual abuse medical evaluation: Role of experience, training, and expert case review Child Abuse & Neglect Volume 36, Issue 5, May 2012,
* Inter-rater reliability in child sexual abuse diagnosis among expert reviewers. SP Starling, LD Frasier, K Jarvis, A McDonald - Child abuse & neglect, 2013
* Development of standardized clinical training cases for diagnosis of sexual abuse using a secure telehealth application. LD Frasier, I Thraen, R Kaplan, P Goede - Child abuse & neglect, 2012