QUERI UPDATE

Developing an Educational Toolkit for Veterans with SCI/D

Spinal Cord Injury QUERI June 2014

SCI-QUERI and Infection Prevention

The Spinal Cord Injury Quality Enhancement Research Initiative (SCI-QUERI) works closely with VHA's Office of SCI/D Services and the SCI/D System of Care to improve the lives of Veterans with spinal cord injuries and disorders (SCI/D). SCI-QUERI's primary mission is to promote the health, independence, functioning, quality of life, and productivity of Veterans with SCI/D through the implementation of evidence-based findings. Infection prevention and management is one of the priority research areas. SCI-QUERI has been working with SCI/D Services and the Multi-drug Resistant Organism (MDRO) program office to evaluate the implementation of VA's National MRSA Prevention Initiative in SCI units. In collaboration with these operations partners, SCI-QUERI has described the experience of the SCI Centers with the MRSA Prevention Initiative, and has evaluated current practices and barriers with implementation of the MRSA Prevention Program. A key identified gap was the limited education received by Veterans with SCI/D about MRSA. Therefore, SCI-QUERI developed, tested, and disseminated the SCI/D MRSA educational toolkit (the SCI/D MET) for providers to use to educate Veterans with SCI/D and their informal caregivers about MRSA; this toolkit has been disseminated nationally across the SCI Centers.

MRSA Education in VA SCI Centers: Current Practices

As part of a broader assessment related to MRSA prevention, SCI-QUERI conducted a survey of VA SCI healthcare workers (HCWs) to assess current practices related to MRSA education in VA SCI Centers. Complete data from the study survey were available for 234 HCWs, including nurses (56.4%), therapists (24.4%), physicians (11.1%), and other health professionals (8.1%). More than half of respondents reported that in the past 12 months, they 'usually/always' provided MRSA education to SCI/D patients (53.4%). Similar results were found for providing hand hygiene education. Half of HCWs reported that the hand hygiene and MRSA education that they provided was 'good/excellent'. These findings suggested that there was a need for an educational intervention that formalized MRSA education for Veterans with SCI/D to ensure that they were receiving the information they need about MRSA.

Development and Testing of an SCI/D MRSA Educational Toolkit (SCI/D MET)

SCI-QUERI conducted a literature review, and focus groups with SCI/D providers and with Veterans with SCI/D, to identify topics related to MRSA prevention that should be included in educational materials for Veterans with SCI/D. Investigators found that at baseline, patient education about MRSA and hand hygiene was limited, and that providers identified a need for SCI/D-specific educational materials and effective ways to teach patients about MRSA. Based on these data, new educational materials and an educational strategy were developed.

The educational strategy was then tested for its impact on patient knowledge, behavior, and intentions in an implementation trial. Thirty Veterans with SCI/D were randomized to the intervention, which was provided by the nursing staff on the unit, while 31 Veterans with SCI/D received usual education (receipt of a brochure and referral to their physician for questions). The intervention included a brochure and tools to assist nurses in conducting the education.

The intervention group's knowledge score significantly increased from pre- to post-intervention, while the usual care group's score did not significantly change. The mean knowledge change was not significantly different in treatment groups. Behavior scores did not differ between treatment groups, but the intervention group was more likely to report intentions to clean hands (90.0% vs 64.5%) and asking providers about MRSA status (46.7% vs 16.1%). Nurse educators also reported the quality of the intervention was high, and that it could be implemented in clinical care.

Impact on Clinical Care

The SCI/D MET offers SCI/D providers a tailored education program for Veterans with SCI/D, which includes elements to promote knowledge retention, active participation, and return-demonstration of skill for the patient. The ultimate goal is to have all patients with SCI/D educated about MRSA with this toolkit.

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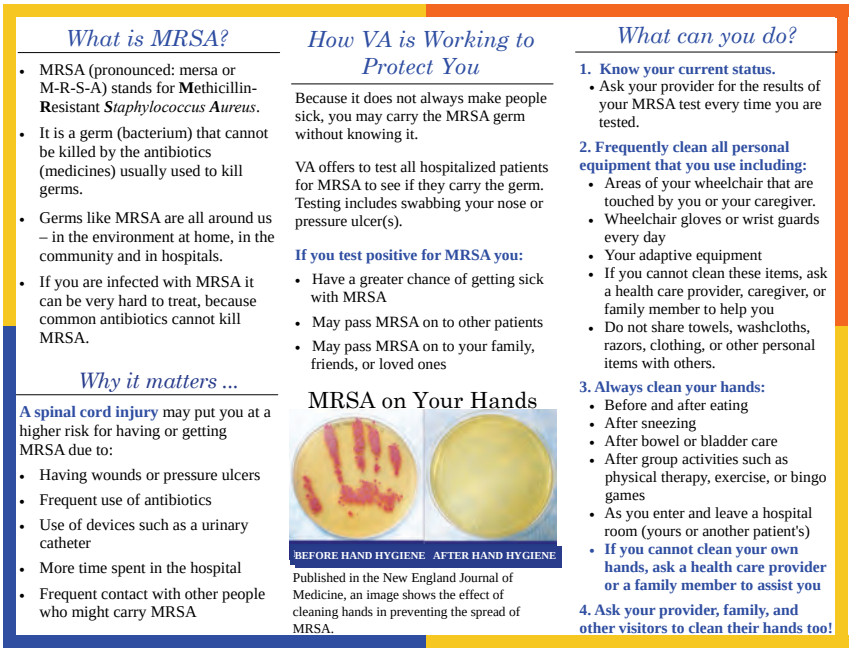

What is MRSA?

- MRSA (pronounced: mersa or M-R-S-A) stands for **M**ethicillin-**R**esistant ***S**taphylococcus **A**ureus*.
- It is a germ (bacterium) that cannot be killed by the antibiotics (medicines) usually used to kill germs.
- Germs like MRSA are all around us – in the environment at home, in the community and in hospitals.
- If you are infected with MRSA it can be very hard to treat, because common antibiotics cannot kill MRSA.

Why it matters ...

A spinal cord injury may put you at a higher risk for having or getting MRSA due to:

- Having wounds or pressure ulcers
- Frequent use of antibiotics
- Use of devices such as a urinary catheter
- More time spent in the hospital
- Frequent contact with other people who might carry MRSA

How VA is Working to Protect You

Because it does not always make people sick, you may carry the MRSA germ without knowing it.

VA offers to test all hospitalized patients for MRSA to see if they carry the germ. Testing includes swabbing your nose or pressure ulcer(s).

If you test positive for MRSA you:

- Have a greater chance of getting sick with MRSA
- May pass MRSA on to other patients
- May pass MRSA on to your family, friends, or loved ones

MRSA on Your Hands

BEFORE HAND HYGIENE AFTER HAND HYGIENE

Published in the New England Journal of Medicine, an image shows the effect of cleaning hands in preventing the spread of MRSA.

What can you do?

1. Know your current status.
- Ask your provider for the results of your MRSA test every time you are tested.

2. Frequently clean all personal equipment that you use including:
- Areas of your wheelchair that are touched by you or your caregiver.
- Wheelchair gloves or wrist guards every day
- Your adaptive equipment
- If you cannot clean these items, ask a health care provider, caregiver, or family member to help you
- Do not share towels, washcloths, razors, clothing, or other personal items with others.

3. Always clean your hands:
- Before and after eating
- After sneezing
- After bowel or bladder care
- After group activities such as physical therapy, exercise, or bingo games
- As you enter and leave a hospital room (yours or another patient's)
- **If you cannot clean your own hands, ask a health care provider or a family member to assist you**

4. Ask your provider, family, and other visitors to clean their hands too!

Inside of the "MRSA Matters" brochure for Veterans with SCI/D. The entire toolkit can be found at the VA SCI/D Services website: http://vaww.sci.va.gov/SCI_MRSA.asp. (Intranet only)

Spinal Cord Injury and Disorders MRSA Educational Toolkit (SCI/D MET)

The SCI/D MET provides tailored education on how to prevent MRSA in SCI/D. The education covers the following major topic areas:

- What is MRSA,
- Risk-factors for individuals with SCI/D,
- What VA does to protect patients,
- What patients can do to help prevent the spread of MRSA,
- Instructions for proper hand hygiene, and
- Information on caring for wounds.

The centerpiece of the education is the educational flip-chart, a tool for encouraging discussion between the patient and the educator. In addition to the educational tools, the SCI/D MET also includes nurse-administered educational assessments to assess patient understanding of the information and any information that should be reviewed with the patient again.

How Do I Learn More?

For information about SCI-QUERI contact:

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Web Resources

For more information about the QUERI program in general, and to link to all of the individual QUERI Centers, please go to

www.queri.research.va.gov

The SCI-QUERI Executive Committee

Each QUERI Center is led by a research expert and a clinician. The research experts and Co-Directors for SCI-QUERI are **Charlesnika T. Evans, Ph.D., M.P.H.** and **Bridget Smith, Ph.D.** The clinical coordinator is **Barry Goldstein, M.D., Ph.D.** The Executive Committee includes other experts, representatives of service organizations, and consumers in the field of spinal cord injury: Leigh Anderson, M.D.; Barbara Bates-Jensen, Ph.D.; Stephen Burns, M.D.; Martin Evans, M.D.; Gail Powell-Cope, Ph.D.; Sunil Sabharwal, M.D.; Arthur Sherwood, P.E., Ph.D. (National Institute on Disability and Rehabilitation Research); and Carol VanDeusen Lukas, Ed.D.