

DOMANDA N. 1

Linee guida nel management dell'intubazione difficile prevista

u/p
Jr
A

Abn
EST RATA
16-05-23
Se

DOMANDA N. 2

Linee guida nel management dell'intubazione difficile
imprevista

u/l
D
A

ESTRATTA

S
16-05-23

DOMANDA N. 3

Ventilazione nel paziente affetto da ARDS

u/v

Es

P

NON
SERTORI A
16-05-23
SE

Care bundles in intensive care

Deborah L Horner MB ChB BSc FRCA
Mark C Bellamy MA MB BS FRCA FFICM



Key points

A care bundle is a group of three to five evidence-based interventions which, when performed together, have a better outcome than if performed individually.

Care bundles can be used to ensure the delivery of the minimum standard of care.

They can be used as an audit tool to assess the delivery of interventions but do not assess how well individual interventions are performed.

Care bundles should encourage the review of evidence and modification of clinical care guidelines, engendering staff education in best practice.

The sepsis care bundle, part of the international Surviving Sepsis campaign, is the most widely utilized bundle.

The bundle approach to providing medical care has become increasingly popular in recent years. A care bundle is a group of interventions which when delivered together lead to a better outcome than performing interventions individually, representing an improvement over a non-structured approach.

History

Care bundles were first developed over 20 yr ago. They have been used in a number of different medical and surgical specialities and have been used particularly extensively in cardiology. The care bundle approach to providing medical care forms part of a more general philosophical change in the way that medicine is practised. Important key elements include the development and widespread application of evidence-based medicine (on which bundles are based), the introduction of audit and performance assessment, and the introduction of guideline and protocol-based care to ensure the delivery of a minimum standard.

Interest in the application of care bundles to critical care developed in the late 1990s and early years of this century. This was fuelled by the publication of an early goal-directed therapy study in the treatment of severe sepsis and septic shock.¹ Although this study is now considered controversial, it generated much interest at the time because the apparent improvement in outcomes it demonstrated came about as the result of implementation of a protocol involving a number of distinct elements which could be regarded as (or in a more general sense, delivered as) a care bundle.

Bundles were further described by Berenholtz and colleagues² as a means of assessing quality of care. In their approach, interventions were applied which could be shown to prevent avoidable morbidity and mortality. They could further be viewed as a method of improving the processes involved in clinical care. As can be seen from this approach, care bundles have two main strands, focusing on (i) the interventions themselves and (ii) the

processes of care delivery. Consequently, the care bundle is also seen as a valuable tool for audit and quality assurance. As such, it has become popular both as a management and clinical tool.

Bundles formed a key part of the '100 000 Lives Programme' (2004) and the '5 Million Lives Campaign' (2006) introduced by the Institute for Healthcare Improvement.³ These were aimed at increasing patient safety and improving quality of care in a variety of clinical conditions. In critical care medicine, these included sepsis, cardiac, and respiratory failure. On the international scene, bundles have also been strongly promoted in critical care. A key example of this is the Surviving Sepsis campaign. This international collaborative initiative aimed to design and implement a care bundle approach to improve survival from severe sepsis by 25% by the year 2009. The success of all three care bundle programmes described above has led to further enthusiasm and interest in intensive care bundles for the management of a wider range of conditions in the future.

Elements of care bundles

A care bundle consists of a group of (usually) between three and five evidence-based interventions. These are related to a particular condition or event in patient care. In practice, the evidence base relating to much of intensive care medicine is still evolving and, at the present time, is insufficient for all elements of care bundles to be level Ia evidence. Where high levels of evidence exist, these are incorporated into care bundles, although many components are drawn from lower levels of evidence including expert opinion. As a result, care bundles require continuous re-evaluation and periodic updating. Interventions are grouped together in this way, on the assumption that the interventions, when executed together, result in better outcomes than would be the case if they were implemented individually.

The choice of interventions for inclusion in a care bundle is often contentious and heavily

Deborah L Horner MB ChB BSc FRCA
Specialist Registrar
Intensive Care Unit
St James's University Hospital
Leeds LS9 7TF
UK

Mark C Bellamy MA MB BS FRCA
FFICM
Professor
Intensive Care Unit
St James's University Hospital
Leeds LS9 7TF
UK
Tel: +44 113 206 5789
Fax: +44 113 206 4141
E-mail: m.c.bellamy@leeds.ac.uk
(for correspondence)

- 1 che cosa serve il comando "graffetta" nel programma Outlook
- 2 per inoltrare una mail a un soggetto come destinatario per conoscenza sotto quale voce va inserito l'indirizzo? A: - CC: - CCN:
- 3 cosa serve il comando CTRL+C?
- 4 A cosa serve il comando CTRL+V?
- 5 A cosa serve il comando CTRL+X?
- 6 per sottolineare un testo in word si usa il comando G, C, ovvero S?
- 7 Come si deve fare per evidenziare in colore giallo un testo di Word?
- 8 In Excel, come si effettua la sommatoria di una serie di cifre?
- 9 in Excel come si imposta una formula (ad esempio, sottrazione)?
- 10 In Excel come si possono impostare le cifre decimali?
- 11 Come si imposta un'interlinea in word?
- 12 Come si fa a salvare un documento in Word?
- 13 Come si fa a copiare un file da una cartella all'altra in word?
- 14 Come si invia un file per posta elettronica?
- 15 Come si imposta una pagina in Excel?
- 16 Come si imposta l'area di stampa in Excel?
- 17 Come si inserisce una riga in Excel?
- 18 Che cosa si intende per "piè di pagina" in Word?
- 19 A cosa serve il comando "intestazione" in word?
- 20 A cosa serve il comando "commento" in word?
- 21 Come si fa a visualizzare contemporaneamente due documenti diversi in word?

Handwritten signature or initials in black ink, consisting of several stylized, overlapping loops and lines.