Triage: è ancora necessario?
In attesa del medico o del trattamento?

NAPOLI, 18 novembre 2016

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NAPOLI 18-20 NOVEMBRE 2016

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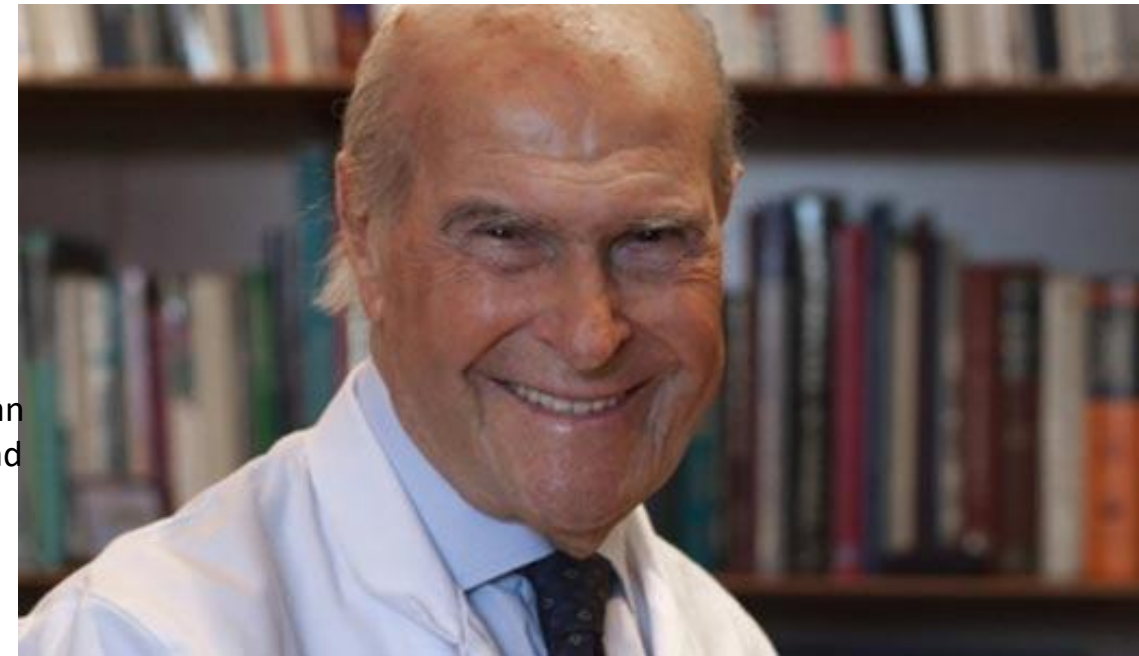
Grazie

Grazie mio carissimo Prof. Berni

Emergency medicine specialist who “taught Italy how to do first aid”

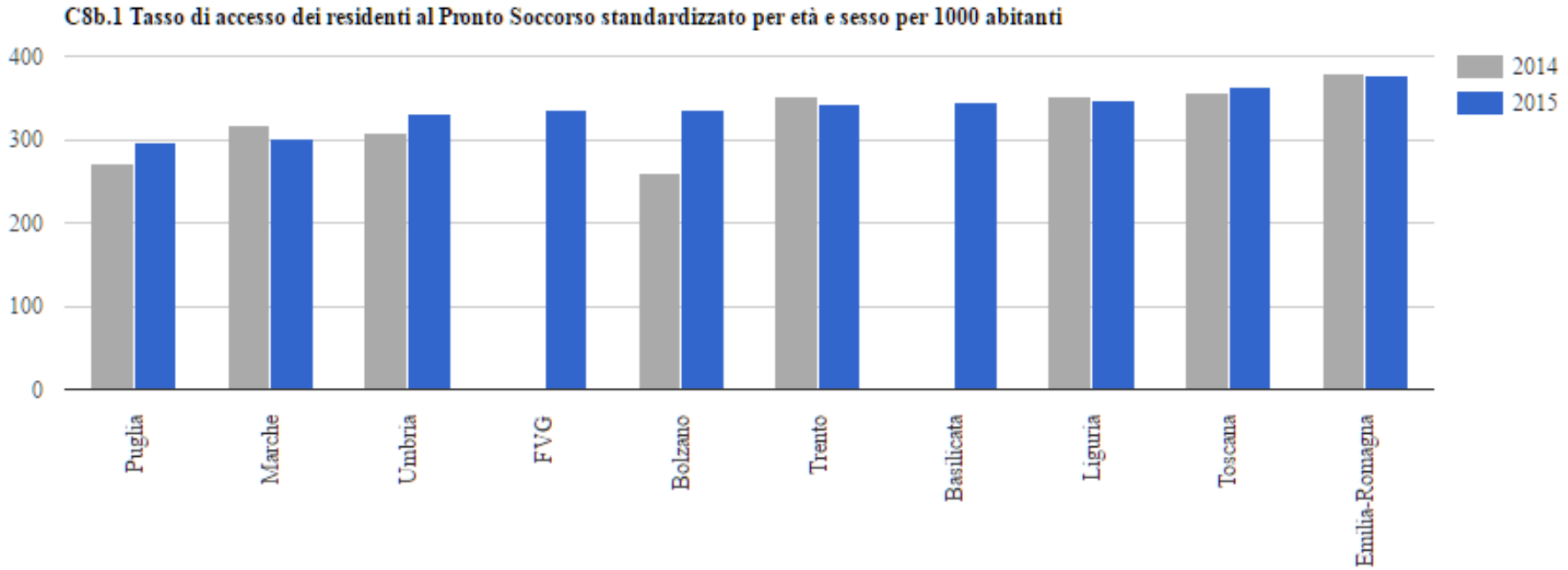
Giancarlo (Gianni) Berni, who has died just a few months short of his 80th birthday, is credited with bringing emergency and intensive care to the Italian region of Tuscany, where he was born, grew up, and spent his working life.

BMJ 2016;354:i4533



Serve ancora il Triage?

Circa 350 residenti su 1000 accedono al PS ogni anno



Triage ancora necessario?

Il triage infermieristico non è necessario solo perché disposto dalle norme
ma piuttosto perché costituisce uno snodo decisivo nell'organizzazione dell'intero
percorso della persona in Pronto Soccorso

Ok, il Triage ancora necessario,
MA 'consuma' un sacco di tempo!

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Emergency department triage performance timing. A regional multicenter descriptive study in Italy

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Objectives: We explored the time employed by nurses to perform the ED triage process in the clinical setting. Moreover, we assessed the influences on triage timing performance exerted by variables related to nurses, local EDs' features, and by interruptions.

Methods: This is a multicenter prospective descriptive-explorative study performed in 11 EDs of the Tuscany region (Italy), using a 5 tier triage system. The sample was made up of 1/3 of nurses working in each ED. Sampling was performed by a stratified proportional randomization (length of service classes: <5 years; 5–10 years; >10 years). Triage nurses were observed during their triage work-shift.

Results: In 2014, 120 nurses were observed, during 1114 triage processes. The timings of triage phases were: waiting time to triage, median 2.55 min (IQR 1.28–5.03 min; range 0.1–56.25 min); triage duration, median 2.58 min (IQR 1.36–4.35 min; range 0.07–50 min). 400 interruptions were recorded (35.9%). In 9.9% there were 2 interruptions at least. There were significant differences in the medians of triage duration among the years of nurses' triage experience ($P < 0.001$). The presence of interruption was significantly associated with the increasing of the time intervals in all the triage phases ($P < 0.0001$). Finally, we recorded significant differences in all the triage time phases between the EDs.

Conclusion: We found that the nurses triage time performances are similar to other triage systems in the world.

Tempo di Attesa al triage 2.55’

Tempo di Triage 2.58’

Ok Triage necessario e rapido, MA quale Triage serve al PS?

Presidenza del Consiglio dei Ministri

CONFERENZA PERMANENTE PER I RAPPORTI TRA LO STATO, LE REGIONI E LE PROVINCE AUTONOME DI TRENTO E BOLZANO

Accordo, ai sensi dell'articolo 4 del decreto legislativo 28 agosto 1997, n. 281, tra il Governo, le Regioni e le Province autonome di Trento e di Bolzano sul documento recante: "Linee di indirizzo per la riorganizzazione del sistema di emergenza urgenza in rapporto alla continuità assistenziale".

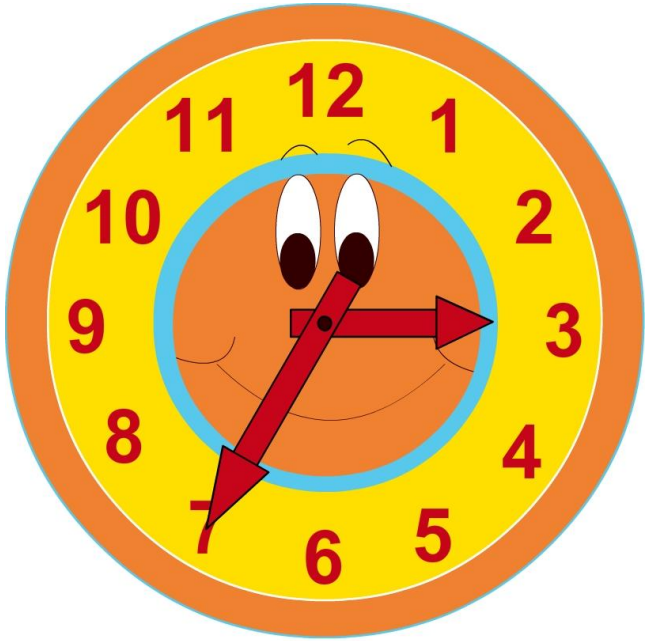
Rep. Atti n. 36/CSR del 7 febbraio 2013

c) realizzare all'interno del Pronto Soccorso e del Dipartimento di Emergenza-Accettazione percorsi separati clinico - organizzativi dei pazienti classificati dai Sistemi di Triage con codici di gravità Rossi e Gialli da quelli Verdi e Bianchi, anche con l'invio di questi ultimi a *team* sanitari distinti per le prestazioni a basso contenuto di complessità che non necessitano di trattamento per acuti o comunque di permanenza in ambiente ospedaliero;

… dal triage si attivano due o tre flussi all'interno dei quali si possono riconoscere un numero più alto, seppur comunque limitato, di percorsi.
I flussi che si originano dal triage possono riguardare la medio bassa e l'alta priorità o distinguere le prime due classi di pazienti; la decisione riguarda particolarmente la dimensione del Pronto Soccorso e la casistica gestita.

Il tempo d’attesa deve essere considerato come quello che intercorre tra l’inizio del triage e l’esecuzione del **primo intervento diagnostico terapeutico assistenziale** coerente col problema di salute presentato, a prescindere dal professionista che lo assicura.

T00 attesa del triage
T0 Triage
T1 Apertura PDTA
T2 valutazione medica



Data:
venerdì 22.11.2013

Internazionale

Estratto da Pagina:
36

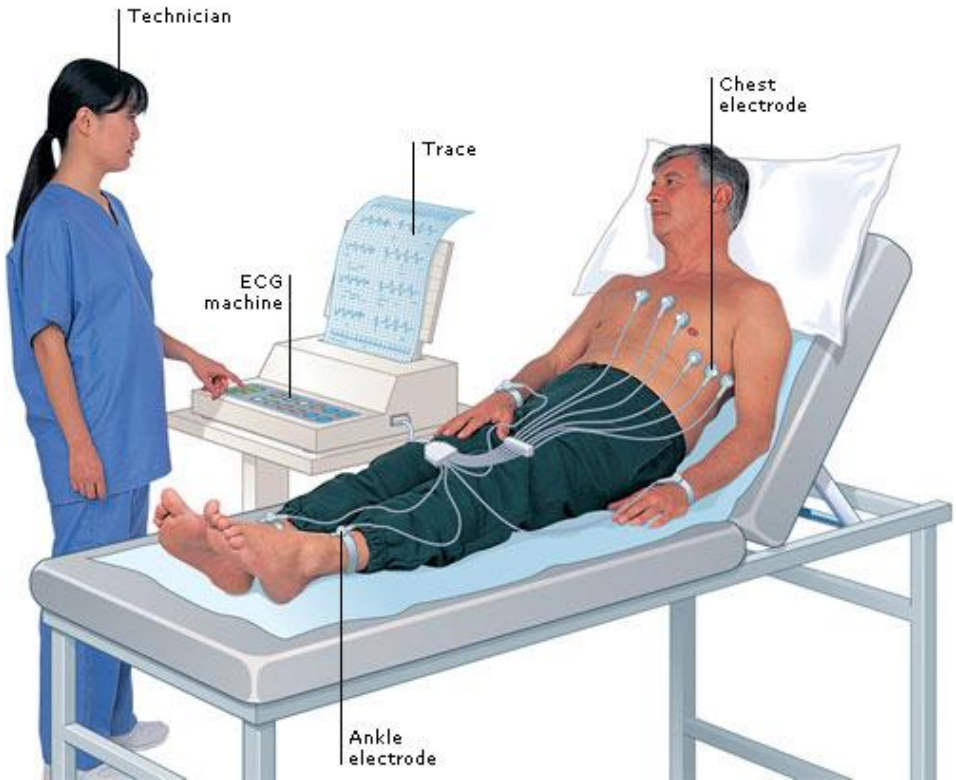
In copertina

La lentezza delle idee

Atul Gawande, The New Yorker, Stati Uniti

Alcune innovazioni fondamentali si diffondono rapidamente, altre incontrano resistenze apparentemente senza senso. Come accelerare i tempi di quelle più lente? La tecnologia non basta, scrive il chirurgo Atul Gawande, per cambiare le norme e le abitudini serve il contatto diretto tra le persone

Possono essere in attesa pazienti così?



La Carta dei Diritti al Pronto Soccorso

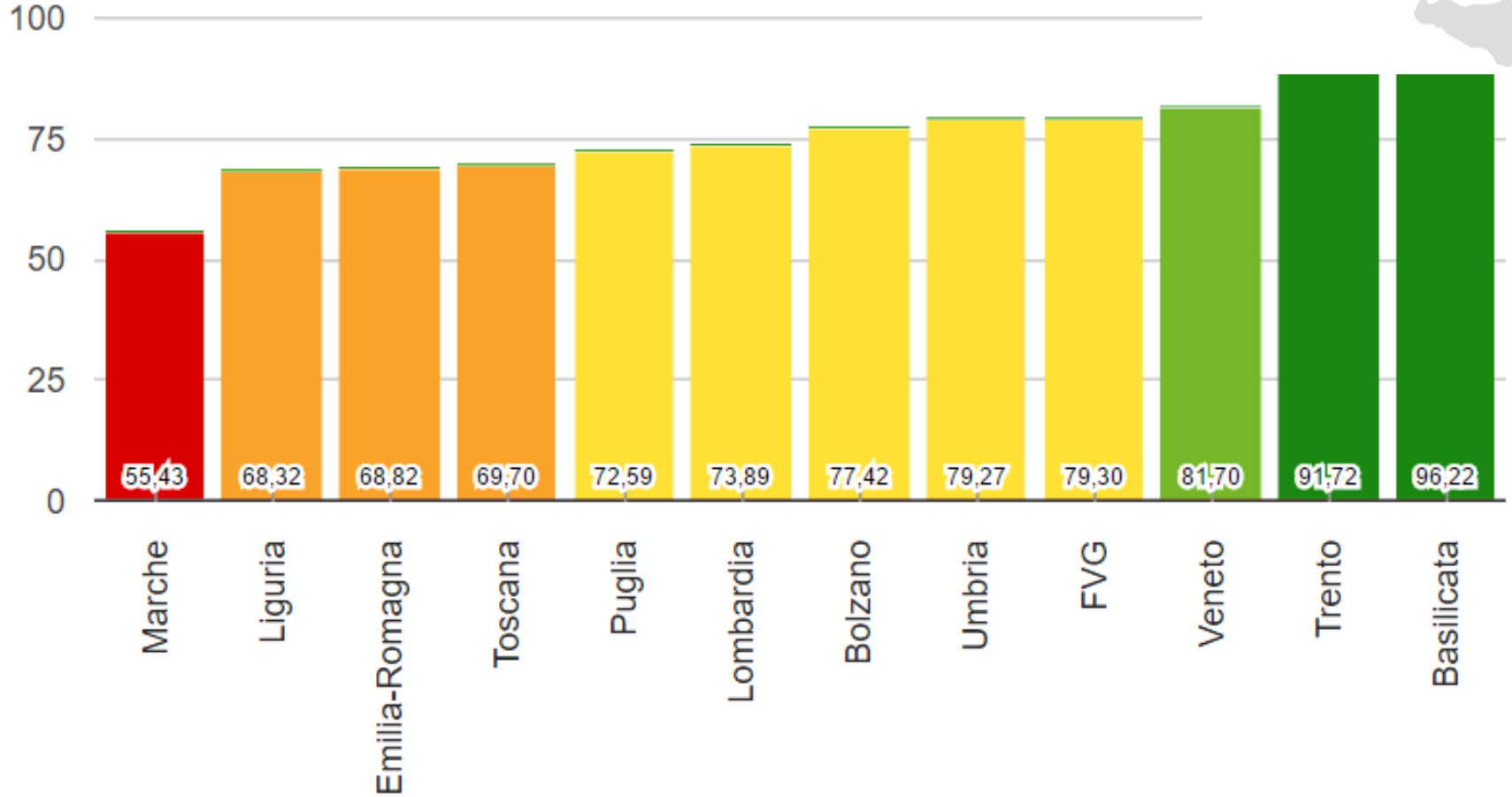
1. Diritto alla presa in carico
Trattamento tempestivo
2. Diritto alla dignità personale
Riservatezza, comfort, parental policy
3. Diritto alla continuità dei percorsi di cura
4. Diritto alla prevenzione delle emergenze evitabili
5. Diritto all'informazione
Trasparenza sui Codici di Triage
6. Diritto alla competenza
Competenze specialistiche ed aggiornate, anche al diversity management
7. Diritto alle "sei ore"
No boarding!!!
8. Diritto all'attuazione della Carta dei Diritti al Pronto Soccorso

REGIONE TOSCANA

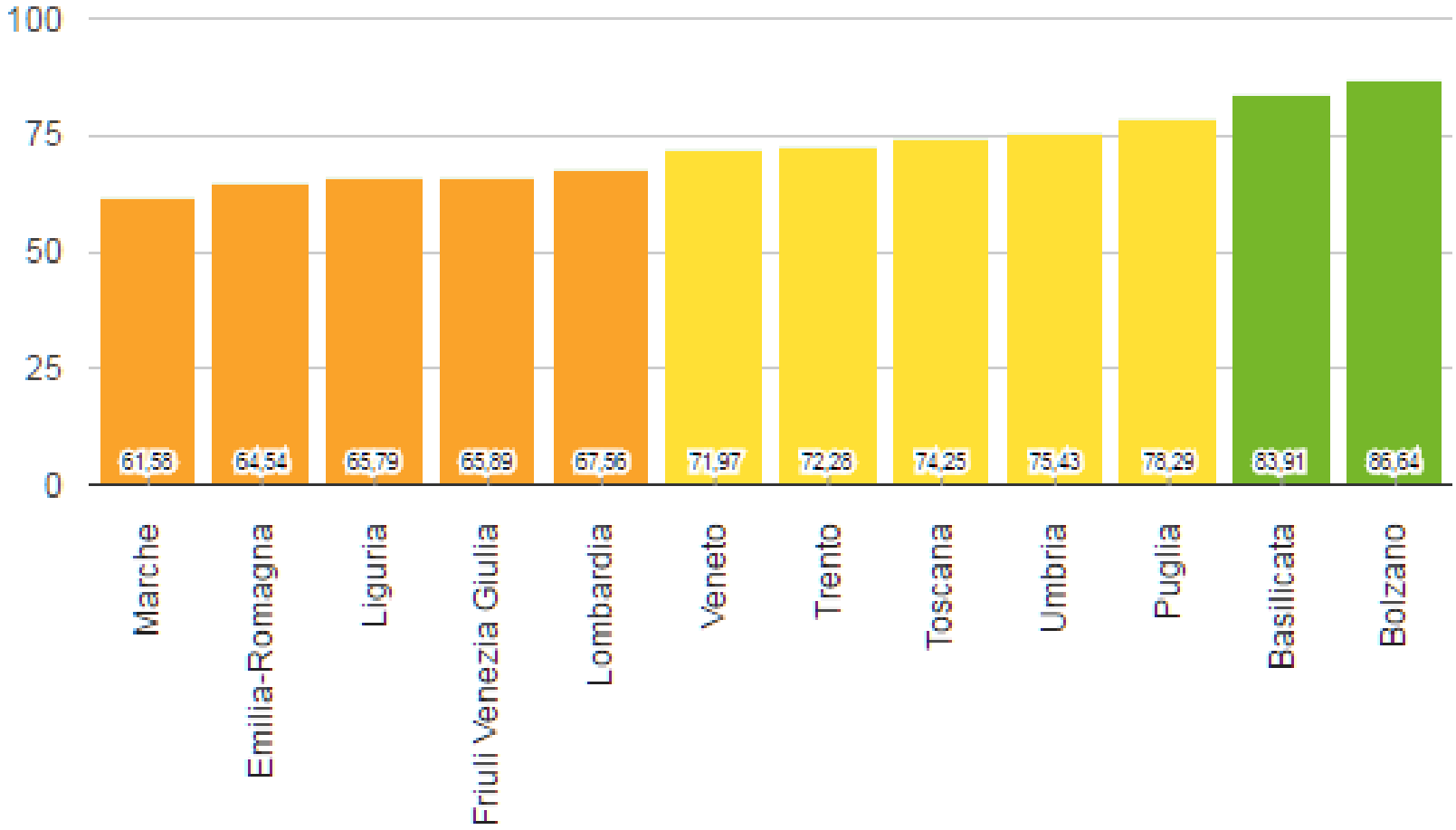
management e sanità
Laboratorio di ricerca e formazione per il Management dei Servizi alla Salute

SCUOLA SUPERIORE SANT'ANNA PISA

C16.1 % accessi in PS con codice giallo visitati entro 30 minuti



C16.2 % accessi in PS con codice verde visitati entro 1 ora



Prehosp Emerg Care. 2016 Jul 15:1-4.

Quantitative Analysis of the Content of EMS Handoff of Critically Ill and Injured Patients to the Emergency Department.

Goldberg SA, Porat A, Strother CG, Lim NQ, Wijeratne HR, Sanchez G, Munjal KG.

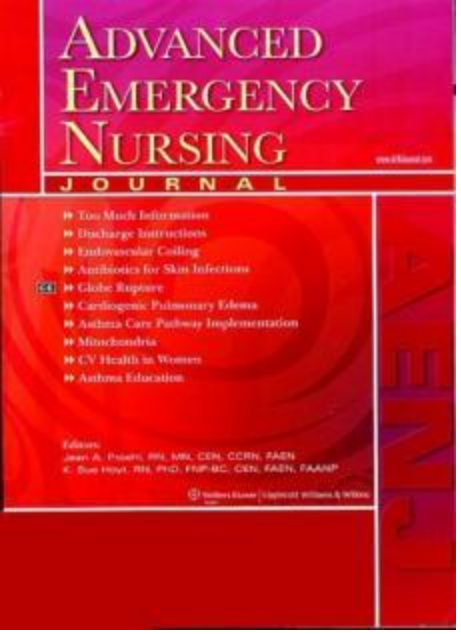
OBJECTIVES: Patient handoff occurs when responsibility for patient diagnosis, treatment, or ongoing care is transferred from one healthcare professional to another. Patient handoff is an integral component of quality patient care and is increasingly identified as a potential source of medical error. However, evaluation of handoff from field providers to ED personnel is limited. We here present a quantitative analysis of the information transferred from EMS providers to ED physicians during handoff of critically ill and injured patients.

METHODS: This study was conducted at an urban academic medical center with an emergency department census of greater than 100,000 visits annually. All patients arriving to our institution by EMS and meeting predefined triage criteria are brought immediately to the ED resuscitation area upon EMS arrival. Handoff from EMS to ED providers occurring in the resuscitation area was observed and audio recorded by trained research assistants and subsequently coded for content. The emergency department team as well as EMS were blinded to study design.

RESULTS: Ninety patient handoffs were evaluated. In 78% (95%CI = 70.0-86.7) of all handoffs, EMS provided a chief concern. In 58% (95%CI = 47.7-67.7) of handoffs EMS provided a description of the scene and in 57% (95%CI = 46.7-66.7) they provided a complete set of vital signs. In 47% (95%CI = 31.3-57.5) of handoffs pertinent physical exam findings were described. The EMS provider gave an overall assessment of the patient's clinical status in 31% (95%CI = 21.6-40.3) of cases. Significantly more paramedic handoffs included vital signs (70% vs. 37%, $\chi 2 = 9.69$, $p = 0.002$) and physical exam findings (63% vs. 23%, $\chi 2 = 14.11$, $p < 0.001$). Paramedics were more likely to provide an overall assessment (39% vs. 17%, $\chi 2 = 4.71$, $p < 0.05$).

CONCLUSIONS: While patient handoff is a critical component of safe and effective patient care, our study confirms previous literature demonstrating poor quality handoff from EMS to ED providers in critically ill and injured patients. Our analysis demonstrates the need for further training in the provision of patient handoff.

Migliorare la comunicazione con gli equipaggi UMS e con questa la continuità, anche delle competenze



Adv Emerg Nurs J. 2016 Jul-Sep;38(3):233-50.

Can Team Triage Improve Patient Flow in the Emergency Department? A Systematic Review and Meta-Analysis.

Ming T1, Lai A, Lau PM.

This systematic review was performed as a feasibility study for revamping the triage service of an emergency department (ED) in a district hospital. In view of the overcrowding problem that plagues EDs worldwide, we reviewed evidence from randomized controlled trials (RCTs) to determine whether ED team triage improves patient flow in comparison with single-nurse triage. We measured improvement in patient flow in terms of the reduction in length of stay (LOS) or wait time (WT) for all ED patients. Adopting the Cochrane methodology, we searched and evaluated data sources for RCTs comparing patients assessed by an ED triage team, with patients receiving single-nurse triage at the same site. The data extracted were independently reviewed by 2 authors for inclusion and quality assessment. As for risk of bias across studies, there was an overall assessment of every outcome across the included studies according to the GRADE (Grading of Recommendations Assessment, Development and Evaluation) criteria for RCTs. In total, 2,164 studies were identified and 2,106 were excluded on the basis of title/abstract, leaving 58 articles for full assessment. Four trials (all cluster RCTs) involving 14,772 patients (165 clusters) met the inclusion criteria. On the basis of our analysis, there was no statistically significant or clinically relevant reduction of LOS and WT for all patients in these studies. One study reported death as an outcome: Relative risk was 0.34 (95% CI [0.01, 8.24]), which suggested that team triage might reduce mortality. Overall, although we have found no conclusive evidence from RCTs to support the use of team triage for improving patient flow in the ED, the results need not deter nursing managers intending to introduce team triage for improving the morale of the triage nurse. However, they may need to consider economic and organizational factors, such as resource reallocation and staff receptiveness, in implementing the new practice.

Non differenza significativa tra single triage nurse e ED Triage team

Acad Emerg Med. 2014 Jul;21(7):794-8.

Patient throughput benefits of triage liaison providers are lost in a resource-neutral model: a prospective trial.

Nestler DM1, Halasy MP, Fratzke AR, Church CJ, Scanlan-Hanson LN, Lohse CM, Campbell RL, Sadosty AT, Hess EP.

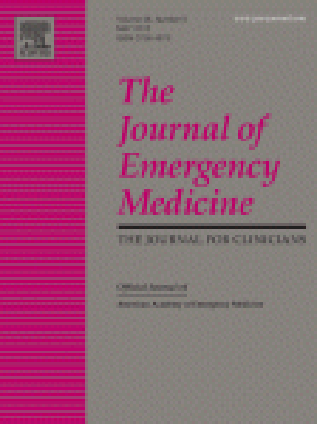
OBJECTIVES: Patient throughput is an increasingly important cause of emergency department (ED) crowding. The authors previously reported shorter patient length of stay (LOS) when adding a triage liaison provider, which required additional personnel. Here, the objective was to evaluate the effect of moving a fast-track provider to the triage liaison role.

METHODS: This was a prospective observational before-and-after study design with predefined outcomes measures. A "standard staffing" situation (where an advanced practice provider staffed treatment rooms in the fast track) was compared with an advanced practice provider performing the triage liaison staffing role, with no additional staff. Eleven intervention ("triage liaison staffing") days were compared with 11 matched control ("standard staffing") days immediately preceding the intervention. Total LOS was measured for all adult Emergency Severity Index (ESI) 3, 4, and 5 patients (excluding behavioral health patients), and results were compared using Wilcoxon rank-sum and chi-square tests.

RESULTS: A total of 681 patients registered on control days and 599 on intervention days. There was no significant difference in total patient LOS: median = 273 minutes, interquartile range (IQR) 176 to 384 minutes on intervention days versus median = 253 minutes, IQR = 175 to 365 minutes on control days (p = 0.20). There was no difference in left-without-being-seen (LWBS) rates (n = 48, 7% on control days vs. n = 35, 6% on intervention days; p=0.38). Secondary analysis of only ESI 3 patients showed no difference in total LOS between periods (median = 284 minutes, IQR = 194 to 396 minutes on intervention days vs. median = 290 minutes, IQR = 217 to 397 minutes on control days; p = 0.22). There was, however, significantly greater total LOS for ESI 4 and 5 patients during the intervention period (median = 238 minutes, IQR = 124 to 350 minutes on intervention days vs. median = 192 minutes, IQR = 124 to 256 minutes on control days; p = 0.011).

CONCLUSIONS: The previously reported benefits on patient LOS and LWBS rates after adding a triage liaison (resource additive) were lost when that provider was moved from fast track to the triage role (resource neutral). While the triage liaison provider role may be a way to improve ED throughput when additional resources are available, as evidenced by our prior study, the triage liaison model itself does not appear to replace the staffing of treatment rooms, as evidenced by this study.

Il rinforzo al Triage impatta sul LoS solo se con risorse aggiuntive, non con lo spostamento dal percorso a bassa priorità



Emerg Med J. 2016 Jul;33(7):504-13.

The impact of senior doctor assessment at triage on emergency department performance measures: systematic review and meta-analysis of comparative studies.

Abdulwahid MA1, Booth A1, Kuczawski M1, Mason SM1.

Author information

STUDY QUESTION: To determine if placing a senior doctor at triage versus standard single nurse in a hospital emergency department (ED) improves ED performance by reviewing evidence from comparative design studies using several quality indicators**.**

DESIGN: Systematic review. **DATA SOURCES:** Cochrane Library, MEDLINE, EMBASE, CINAHL, Cochrane Effective Practice and Organisation of Care (EPOC), Web of Science, Clinical Trials Registry website. In addition, references from included studies and citation searches were used to identify relevant studies.

REVIEW METHODS: Databases were searched for comparative studies examining the role of senior doctor triage (SDT), published from 1994 to 2014. Senior doctor was defined as a qualified medical doctor who completed high specialty training in emergency medicine. Articles with a primary aim to investigate the effect of SDT on ED quality indicators such as waiting time (WT), length of stay (LOS), left without being seen (LWBS) and left without treatment complete (LWTC) were included. Articles examining the adverse events and cost associated with SDT were also included. Only studies with a control group, either in a randomised controlled trial (RCT) or in an observational study with historical controls, were included. The systematic literature search was followed by assessment of relevance and risk of bias in each individual study fulfilling the inclusion criteria using the Effective Public Health Practice Project (EPHPP) bias tool. Data extraction was based on a form designed and piloted by the authors for dichotomous and continuous data.

DATA SYNTHESIS: Narrative synthesis and meta-analysis of homogenous data were performed.

RESULTS: Of 4506 articles identified, 25 relevant studies were retrieved; 12 were of the weak pre-post study design, 9 were of moderate quality and 4 were of strong quality. The majority of the studies revealed improvements in ED performance measures favouring SDT. Pooled results from two Canadian RCTs showed a significant reduction in LOS of medium acuity patients (weighted means difference (WMD) -26.26 min, 95% CI -38.50 to -14.01). Another two RCTs revealed a significant reduction in WT (WMD -26.17 min, 95% CI -31.68 to -20.65). LWBS was reduced in two Canadian RCTs (risk ratio (RR)=0.79, 95% CI 0.66 to 0.94). This was echoed by the majority of pre-post study designs. SDT did not change the occurrence of adverse events. No clear benefit of SDT in terms of patient satisfaction or cost effectiveness could be identified.

CONCLUSIONS: This review demonstrates that SDT can be an effective measure to enhance ED performance, although cost versus benefit analysis is needed. The potential high risk of bias in the evidence identified, however, mandates more robust multicentred studies to confirm these findings.

Medico esperto al Triage:
Impatto significativo su WT e LoS

EMA Emergency Medicine Australasia

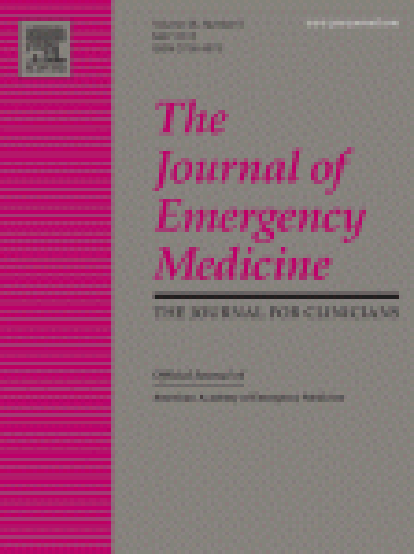
Emerg Med Australas. 2015 Oct;27(5):394-404.

Review article: systematic review of three key strategies designed to improve patient flow through the emergency department.

Elder E1, Johnston AN2, Crilly J2.

To explore the literature regarding three key strategies designed to promote patient throughput in the ED. CINAHL, Medline, PubMed, Scopus and Australian Government databases were searched for articles published between 1980 and 2014 using the key search terms ED flow/throughput, ED congestion, crowding, overcrowding, models of care, physician-assisted triage, medical assessment units, nurse practitioner, did not wait (DNW) and ED length of stay (LOS). Abstracts and articles not published in English and articles published before 1980 were excluded from the review. Quantitative and qualitative studies were considered for inclusion. The National Health Medical Research Council (NHMRC) Level of Evidence Hierarchy (2009) was applied to included studies. Twenty-one articles met criteria for review. The level of evidence assessed using the NHMRC guidelines of studies ranged from I to IV, with the majority falling into the Level II-2 (n = 6) and III-3 (n = 9) range. ED LOS was the outcome most often reported. Study quality was limited with few studies adjusting for confounding factors. Only one level I systematic review was included in this review. Advanced practice nursing roles, physician-assisted triage and medical assessment units are models of care that can positively impact ED throughput. They have been shown to decrease ED LOS and DNW rates. Confounding factors, such as site specific staffing requirements, patient acuity and rest-of-hospital processes, can also impact on patient throughput through the ED.

Infermieristica avanzata, Medico al Triage, unità medica di valutazione possono avere impatto positivo su LoS e LWBS



J Emerg Med. 2015 May;48(5):620-7. doi: 10.1016/j.jemermed.2014.12.025. Epub 2015 Mar 11.

Emergency department rapid medical assessment: overall effect and mechanistic considerations.

Traub SJ1, Wood JP1, Kelley J1, Nestler DM2, Chang YH3, Saghafian S4, Lipinski CA1.

BACKGROUND:

Although the use of a physician and nurse team at triage has been shown to improve emergency department (ED) throughput, the mechanism(s) by which these improvements occur is less clear.

OBJECTIVES:

1) To describe the effect of a Rapid Medical Assessment (RMA) team on ED length of stay (LOS) and rate of left without being seen (LWBS); 2) To estimate the effect of RMA on different groups of patients.

METHODS:

For Objective 1, we compared LOS and LWBS on dates when we utilized RMA to comparable dates when we did not. For Objective 2, we utilized patient logs to divide patients into groups and estimated the effects of the RMA on each.

RESULTS:

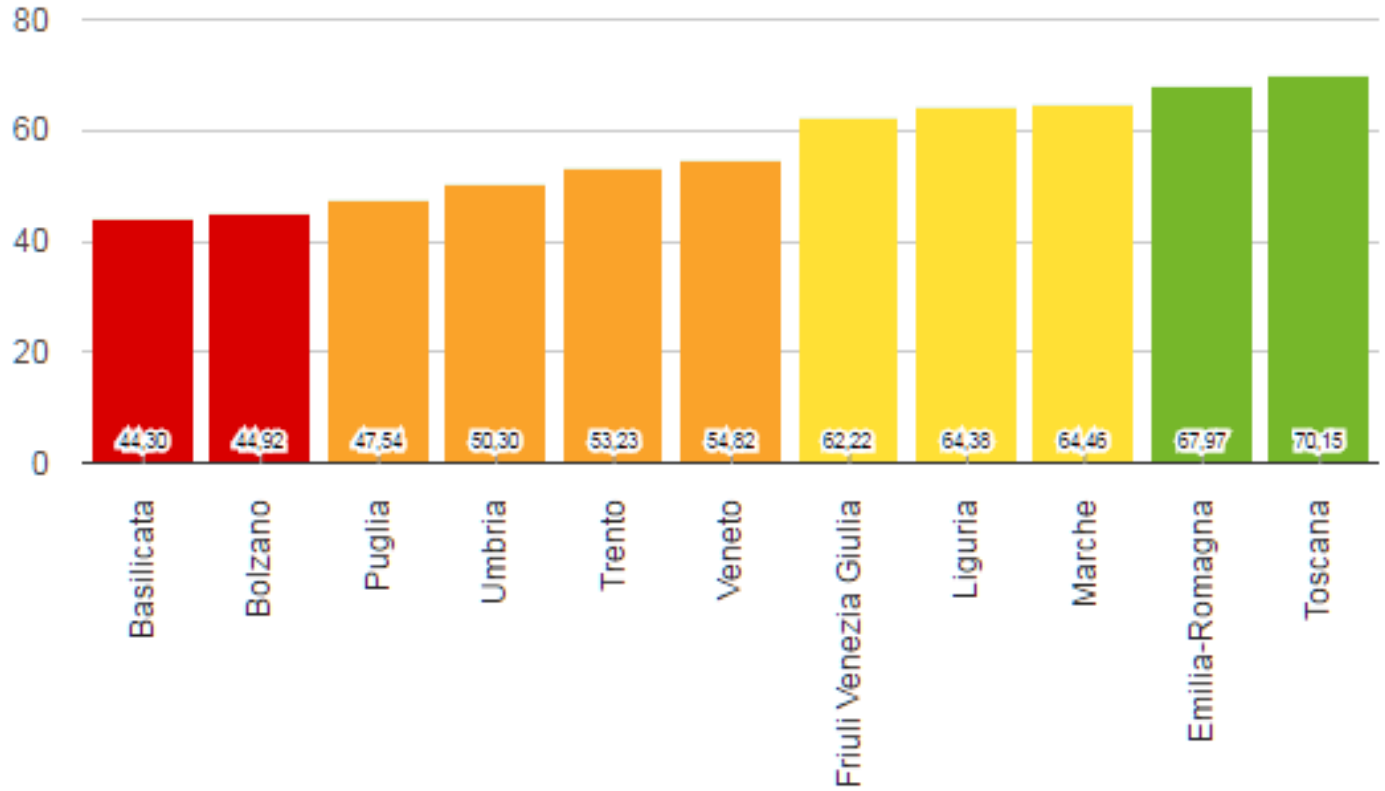
Objective 1. LOS fell from 297.8 min pre-RMA to 261.7 min during RMA, an improvement of 36.1 (95% confidence interval 21.8-50.4) min; LWBS did not change significantly. Objective 2. Patients seen and dispositioned by the RMA had an estimated decrease in LOS of 117.8 min (estimated decrease in LOS of 45%), but patients seen by the RMA whose care was transitioned to the main ED had an estimated increase in LOS of 25.0 min (estimated increase in LOS of 8%).

CONCLUSIONS:

On a system level, the addition of an RMA shift at a single facility was associated with an improvement in LOS, but not LWBS. On a mechanistic level, it seems that improvements occurred as a result of the rapid disposition component of the RMA rather than placing advanced orders at triage.

Il Team di approccio rapido riduce LoS e LWBS se arriva a chiusura del caso

C16.7 % ricoveri da PS in reparti chirurgici con DRG chirurgico alla dimissione



Toscana: lo stato dell'arte

La bozza di lavoro in regione Toscana

L'infermiere di triage è responsabile delle seguenti azioni:

assegna e documenta il codice numerico di priorità in funzione dell'anamnesi mirata, dei rilievi obiettivi, della conseguente valutazione circa il rischio evolutivo e dell'impegno di risorse stimato per il trattamento.

avvia il paziente ai singoli percorsi di diagnosi e trattamento secondo i protocolli in uso assegnando ciascun paziente ai professionisti responsabili del percorso **e documenta la scelta**, in funzione di valutazioni inerenti il bisogno sanitario del paziente, oltre che del grado di impegno del PS al momento.

In particolare assegna al percorso omogeneo

ad alta complessità clinico assistenziale tutti i pazienti valutati con codice 1,

a complessità clinico assistenziale intermedia tutti i pazienti valutati con codice 2 e 3

a bassa complessità clinico assistenziale tutti i pazienti valutati con codice 4 e 5

La bozza di lavoro in regione Toscana

L'infermiere di triage è responsabile delle seguenti azioni:

…

Nei casi destinati all'area a complessità intermedia la funzione di triage può essere seguita da una valutazione medico infermieristica per l'inquadramento rapido; tale opportunità viene fortemente raccomandata quando si richieda una specifica presa in cura, ovvero quando

- l'assegnazione al percorso omogeneo clinico assistenziale sia dubbia,
- sia ravvisata la necessità di un inquadramento medico rapido
- sia ravvisata la possibilità, pur in casi a complessità clinico assistenziale intermedia, di un percorso in PS veloce,

l'infermiere assegnerà il paziente al medico individuato per l' inquadramento rapido e la gestione precoce che determinerà il PDTA conducendolo, nella maggioranza dei casi, fino all'esito.

Nei PS con **oltre 40.000 accessi l'anno**, è fortemente raccomandato che per questa funzione di Inquadramento Rapido e Gestione Precoce del Caso, sia costituito un **team multiprofessionale medico infermieristico** funzionalmente dedicato.

gestisce la lista dei pazienti in attesa di avvio del percorso, effettuando eventualmente la **rivalutazione** dei pazienti secondo le modalità e i tempi previsti dalle LLGG nazionali fino al momento dell'avvio del percorso individuato

Take home messages

Il Triage è necessario

Il tempo di attesa si deve arrestare all'avvio del percorso diagnostico terapeutico assistenziale

Il triage deve essere integrato nell'organizzazione del PS

Il PS deve essere organizzato per flussi omogenei

Il Percorso a complessità intermedia può giovarsi di un team multiprofessionale per la presa in cura rapida

Il Percorso a bassa complessità può giovarsi del See & Treat infermieristico

Grazie.

giovanni.becattini@uslsudest.toscana.it