

attempted control of external bleeding, attempted relief of intolerable and unacceptable pain". In circumstances where a medical condition is less acute and appropriate assessment has been made by a qualified paramedic in consultation with the patient, the patient can refuse hospital transport and the ambulance can safely depart to the next call without recourse.

A comprehensive set of EMS-IROT guidelines can be established for ambulance practitioners to refer to when making a decision to decline or delay a non-emergent patient transportation. These guidelines will be specific to acute non-life threatening conditions. Additional research is needed to evaluate the number of non-life threatening calls received by the EMS call centre, and to ascertain whether or not they makes a substantial difference to total emergency calls transported.

4.3 Limitations to the acceptance and implementation of decline and delay recommendations

Although the law is clear concerning denying a patient emergency treatment it is not clear on declining or delaying transporting a non-emergent patient to a hospital. Additionally, little research has been done in South Africa that specifically deals with the number of non-emergency calls received by EMS call centres and the number of non-emergent patients that are transported to a hospital.

Furthermore, no research has been conducted in South Africa that evaluates the competency of ambulance practitioners when dealing with a decision to delay or decline transport of a non-emergent patient. There has nonetheless been international research relating to the ability of paramedics to assess and triage patients (Silvestri, S., Rothrock, S., et al. 2002 and Snooks, H., Kearlsey, N., et al. 2004). These studies found paramedics to be able to triage patients adequately.

However, these two studies more specifically deal with advanced life support paramedic and adequately resourced EMS operations which may not be the same in South Africa as ambulances are manned by a Basic Ambulance Assistant and Intermediate Life Support practitioner.

A further limitation that may inhibit the advance of a decline or delay of a non-emergent patient transportation protocol is the quality of current short course programmes offered by training institutions, such as Basic Ambulance Assistant, Ambulance Emergency Assistant and Critical Care Assistant, none of which have a strong focus on teaching medical ethics and health law. On the other hand, universities Bachelor's degree in Emergency Medical Care programmes are designed with a stronger focus on emergency care and clinical medicine. Whether or not this level of training will better equip the paramedic to deal with decline or delay of non-emergent patient transportation remains to be evaluated in future research.

4.4 Conclusion

Patients will continue to utilize the emergency medical services despite not having a medical emergency and their reasons for doing so will vary. The question in this research report is "When, if ever, is it acceptable for an ambulance service to decline or delay patient transport in a non-emergency pre-hospital environment?". I argued that, utilitarian theory and theories of distributive justice provide an ethical basis for declining and delaying non-emergency patient transport in situations of scarce resources.

This report also addressed the potential problem that the South African Constitution does not allow for patients to be denied emergency medical treatment or access to health care.

However s27(3) refers to a right to Emergency Medical Treatment as discussed. I pointed out that the definition of an emergency is unclear. However, with certain clarifications discussed in chapter 3 of this research report, it may be possible for an ambulance practitioner to decline or delay a non-emergent patient transport, particularly if the ambulance practitioner has treated the patient and the patient is in a stable and not life threatening condition.

It is important to note that generally denying patient treatment and transportation is not the same as declining or delaying patient transportation of a non-emergency patient. Likewise, there is a substantial difference between acute life threatening medical and acute non-life threatening medical emergencies. Without doubt, many acute life threatening conditions such as trauma, heart attack, stroke, severe blood loss and injuries to the body that restricts the person's ability to function normally should be transported to an emergency department without delay. Equally, acute non-threatening conditions, as described by Gray & Wardrope, (2007), can be treated on scene by the ambulance practitioner and a decline of patient transportation protocol could be initiated.

Other countries such as the United Kingdom and the United States of America continue to test various systems and procedures to allow EMS to delay and or decline transporting a non-emergent patient. Current systems that are designed to delay or deny patient transport are designed around rationing resources and allowing EMS to favour more acute and life threatening emergencies first. Despite these systems being implemented there will always be situations when the ambulance is called to transport a non-emergency patient. In many respects, South Africa is not comparable with the UK or USA for reasons already discussed in this research report.

Hence, it would be necessary to evaluate factors that differ between South Africa and the western models before incorporating western policies into a South African EMS refusal of transportation initiative.

There are numerous advantages and risks to implementing and redesigning an EMS system to allow for delay or decline of transport when a patient is classified as a non-emergent. If the advantages for the EMS and the patient out-weight the risk, then it would make sense to proceed with a decline or delay of non-emergent patient transport protocol. The protocol would have to meet the following criteria: It would have to optimize available ambulance resources whilst at the same time attending to true medical emergencies, it would have to provide non-emergent patients access to health care, it would have to be safe for patients, it would not contravene the law and it would have to respect patient rights and patient autonomy.



Word count 17'185

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APPENDIX A: Emergency Medical Services - Gauteng Performance indicators

APPENDIX A: Emergency Medical Services - Gauteng Performance indicators

Performance indicators	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Strategic objectives	Reasons for variations 2010/2011	Reasons for variations 2011/2012	Reasons for variations 2012/2013
P1 calls with a response time <15 minutes in an urban area	50.00%	50.40%	33.00%	52.00%	Not available at time of report submission	Increase the number of P1 cases responded to within 15 minutes	Reporting from City of Joburg was irregular. There were also sporadic EMS strikes in Joburg. Both these factor would have impacted on response times to P1 calls.	Target not achieved. The department believes that direct control of EMS could improve response times. The process of provincialisation of EMS in the West Rand and Sedibeng began some years ago	Shortages of ambulances and staff continue to impact negatively on the achievement of the target. Incomplete data remains a challenge.
P1 calls with a response time of <40 minutes in a rural area	#	84.10%	100.00%	95.00%	Not available at time of report submission	Increase the number of P1 cases responded to within 40 minutes	There is increased demand for transfer of maternity cases to distant hospitals when local MOUs are full	Target achieved. EMS have been provincialised in outlying areas of Tshwane that were formerly in Metsweding. Challenges here are detected and resolved more quickly and performance has improved	The indicator reflects the situation in Metsweding, the only rural sub-district. Progress has been made on raising performance above 95%.
All calls with a response time within 60 minutes	#	86.50%	93.00%	77.00%	Not available at time of report submission	Increase the number of P1 cases responded to within 15 minutes	This target was exceeded due to efficient use of limited resources and a slight decrease in overall case load	Target achieved. Despite shortages in ambulances, Gauteng EMS endeavors to service all calls within one hour. This sometimes requires the use of private ambulance services to ensate for the shortage in the public health sector	Shortage of ambulances and staff members have impacted on the achievement of the target.
Green code patients transported by ambulance	115155	113044	#	#	Not available at time of report submission		Better triaging of cases and an overall decrease in case load might have led to the drop in P3 patients	#	#
Total number of EMS emergency cases	530908	491435			Not available at time of report submission		Public service strike and sporadic strikes in City of Joburg could have resulted in fewer EMS cases than projected. During FIFA World Cup there was a general reduction in people seeking health services	#	#

Not published

Source

Gauteng Department of Health and Social Development Annual Report 2010/11

Gauteng Department of Health and Social Development Annual Report 2011/12

Gauteng Department of Health and Social Development Annual Report 2012/13

<http://www.health.gbg.gov.za/Pages/Annual-Reports.aspx>

Available at

APPENDIX B: SCOPE OF PRACTICE

PROFESSIONAL BOARD FOR EMERGENCY CARE PRACTITIONERS RULES OF CONDUCT SPECIFICALLY PERTAINING TO THE PROFESSION OF EMERGENCY CARE

In addition to the rules of conduct referred to in rules 2 to 27 a basic life support provider, an intermediate life support provider and an advanced life support paramedic or a basic life support student, an intermediate life support student and a student advanced life support paramedic shall also adhere to the following rules of conduct. Failure to comply with these additional rules of conduct shall constitute an act or omission in respect of which the board may take disciplinary steps in terms of Chapter IV of the Act:

1. Performance of professional acts by a basic life support provider, an intermediate life support provider or an advanced life support paramedic

Notwithstanding the provisions of rule 21, a basic life support provider, an intermediate life support provider or an advanced life support paramedic –

- a) shall not perform any professional act or exercise any capability per incident, other than those set out in the relevant protocol or annexure to such protocol as approved by the board;
- b) shall not hand over the responsibility for the treatment of a patient to any person who is less qualified or experienced than himself or herself, unless such a basic life support provider, intermediate life support provider or advanced life support paramedic assumes full responsibility for the acts performed by such other person.

2. Performance of professional acts by a student basic ambulance assistant, a student emergency care assistant, a student ambulance emergency assistant or a student paramedic

A student basic life support provider shall only perform professional acts under the supervision of a registered intermediate life support provider and, in the case of an intermediate life support student and/or student advanced life support paramedic, under the supervision of a medical practitioner or an advanced life support paramedic and to limit such acts to acts directly related to his / her education and training.

APPENDIX B: SCOPE OF PRACTICE

MEDICATIONS – BLS PROVIDER PROTOCOLS

NO.	MEDICATION
1.	Activated Charcoal
2.	Oral Glucose Powder/ Gel
3.	Medical Oxygen
4.	Nitrous Oxide : Oxygen
	ALGORITHMS
	Basic Life Support Algorithm Choking Algorithm

MEDICATIONS – ILS PRACTITIONER PROTOCOLS

NO.	MEDICATION
1.	Acetyl Salicylic Acid
2.	Activated Charcoal
3.	β2 Stimulants
4.	Dextrose 50%
5.	Oral Glucose Powder/ Gel
6.	Ipratropium Bromide
7.	Medical Oxygen
8.	Nitrous Oxide : Oxygen

MEDICATIONS – ALS PRACTITIONER PROTOCOLS

NO.	MEDICATION	NO.	MEDICATION
1.	Acetyl Salicylic Acid	18.	Ipratropium Bromide
2.	Activated Charcoal	19.	Lignocaine HCl (Systemic)
3.	Adenosine	20.	Lignocaine HCl (Local Anaesthetic)
4.	Adrenaline	21.	Lorazepam
5.	Amiodarone Hydrochloride	22.	Magnesium Sulphate
6.	Atropine Sulphate	23.	Medical Oxygen
7.	Adrenergic Stimulants	24.	Metoclopramide Monohydrochloride
8.	Calcium Chloride	25.	Midazolam
9.	Clopidogrel	26.	Morphine Sulphate
10.	Corticosteroids	27.	Naloxone Hydrochloride
11.	Dextrose 50%	28.	Entonox® Nitrous Oxide and Oxygen
12.	Oral Glucose Powder / Gel	29.	Promethazine
13.	Diazepam	30.	Sodium Bicarbonate 8.5%
14.	Flumazenil	31.	Thiamine Hydrochloride
15.	Furosemide		
16.	Glucagon		
17.	Glyceryl Trinitrate		

Source: Health Professions Council of South Africa Available Online at:
<http://www.hpcsa.co.za/PBEmergencyCare/Guidelines>

APPENDIX C: World Health Organisation International Classification of Primary Care codes (ICPC-2)

Definition of “non-urgent” encounters

Based on the ICPC-2 codes of the reason for encounter, Bardelli and Kaplan defined “non-urgent” encounters and categorised them to simplify the presentation as follows:

“cough/sneezing” (cough [R05],	sneezing/nasal congestion [R07],
throat symptoms [R21]),	“follow-up” (encounter initiator not specified [*63]),
encounter initiated by provider [*64],	encounter initiated by others [*65]),
“weakness/tiredness” (weakness [A04],	fatigue [A05]),
“fear of HIV/other disease” (fear of AIDS/HIV [B25],	fear of sexually transmitted disease [Y25],
fear of respiratory disease [R27],	fear of other disease [A27]),
“skin problem” (skin problems [S01–S99]),	anxious/nervous/depressed” (feeling anxious/nervous/tense [P01],
feeling depressed [P03],	feeling/behaving irritable [P04]),
“dysuria/frequency/urgency” (lower urinary tract problem [U01-U05, U29, U71, U72]), and “others”	(sweating problem [A09],
Concern about medical treatment [A13],	constipation [D12],
flatulence/belching [D08]	suspicion of foreign body in the digestive system [D79], elevated blood pressure [K85],

APPENDIX C: World Health Organisation International Classification of Primary Care codes (ICPC-2)

sleep disturbance [P06],	chronic substance abuse [P15, P18, P19],
memory problem [P20],	loss of appetite [T03],
social and legal problems [Z09],	blood test/monitoring of oral anticoagulation [*34],
preventive immunisation/medication [*44],	medical information/health education/advice [*45],
Medication / prescription renewal [*50].	

Source: Bardelli, P., Kaplan, V., 2013. Non-urgent encounters in a Swiss medical emergency unit.

Swiss Medical Weekly.

APPENDIX D: Approval from post graduate office



Faculty of Health Sciences
Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172040

Reference: Ms Thokozile Nhlapo
E-mail: thokozile.nhlapo@wits.ac.za

Mr D Saunders
PO BOX 1901
CRAMERVIEW
2060
South Africa

20 May 2014
Person No: 767179
PAG

Dear Mr Saunders

Master of Science in Medicine: Approval of Title

We have pleasure in advising that your proposal entitled *The ethics of declining or delaying patient transport in a non-emergency pre-hospital environment* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

A handwritten signature in cursive script, appearing to read "Sandra Benn".

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

APPENDIX E: Ethics clearance

Human Research Ethics Committee (Medical)

Research Office Secretariat: Senate House Room SH 10005, 10th floor. Tel +27 (0)11-717-1252
Medical School Secretariat: Medical School Room 10M07, 10th Floor. Tel +27 (0)11-717-2700
Private Bag 3, Wits 2050, www.wits.ac.za. Fax +27 (0)11-717-1265



Ref: W-CJ-140425-4

25/04/2014

TO WHOM IT MAY CONCERN:

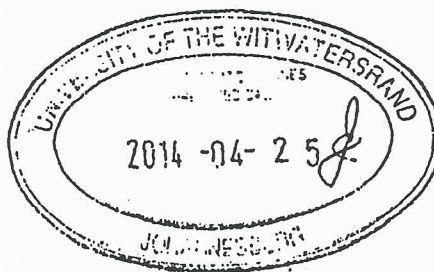
Waiver: This certifies that the following research does not require clearance from the Human Research Ethics Committee (Medical).

Investigator: Mr D Saunders (Student No 767179).

Project title: The ethics of declining or delaying patient transport in a non-emergency pre-hospital environment.

Reason: This study uses information in the public domain. There are no human participants.

A handwritten signature in black ink, appearing to read "Peter Cleaton-Jones".



Professor Peter Cleaton-Jones

Chair: Human Research Ethics Committee (Medical)

Copy - HREC(Medical) Secretariat: Anisa Keshav, Zanele Ndlovu.