

Appendix and References

Quality Improvement Methodology for Reducing Lights and Sirens use in EMS

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Every system
is perfectly
designed
to get
the results
is gets .

Deming
Batalden
Berwick

A white golf ball with dimples is positioned on a red tee, surrounded by green grass. The background is a plain white surface.

**Reducing
Lights and Sirens in EMS
With
Quality Improvement
Methodology**

AIM

Reduce the use of L&S Responses to < 50 % by March 24th , 2023
 Reduce the use of L&S Transports to < 5 % by March 24th , 2023



Lights and Siren Use by Emergency Medical Services (EMS): Above All Do No Harm
 Author:
 Douglas F. Kupas, MD, EMT-P, FAEMS, FACEP

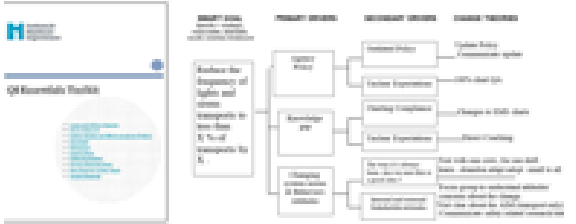
Measures

N: Number of responses that did not use lights and sirens D: total number of responses
 N: Number of transports that did not use lights and sirens D: total number of transports



Change ideas

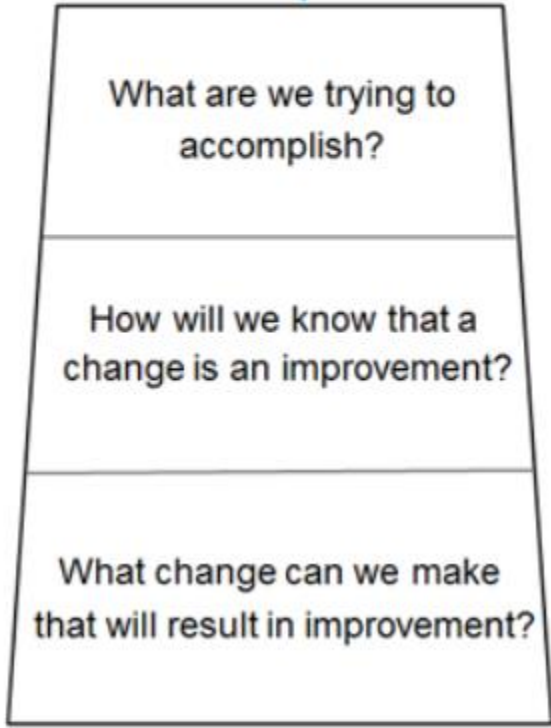
Understand **YOUR** system
 -look for your **urban legends**



Test change ideas, learn, Adapt Adopt Abandon

-small to all one medic, one crew, one call, one hall

Model for Improvement



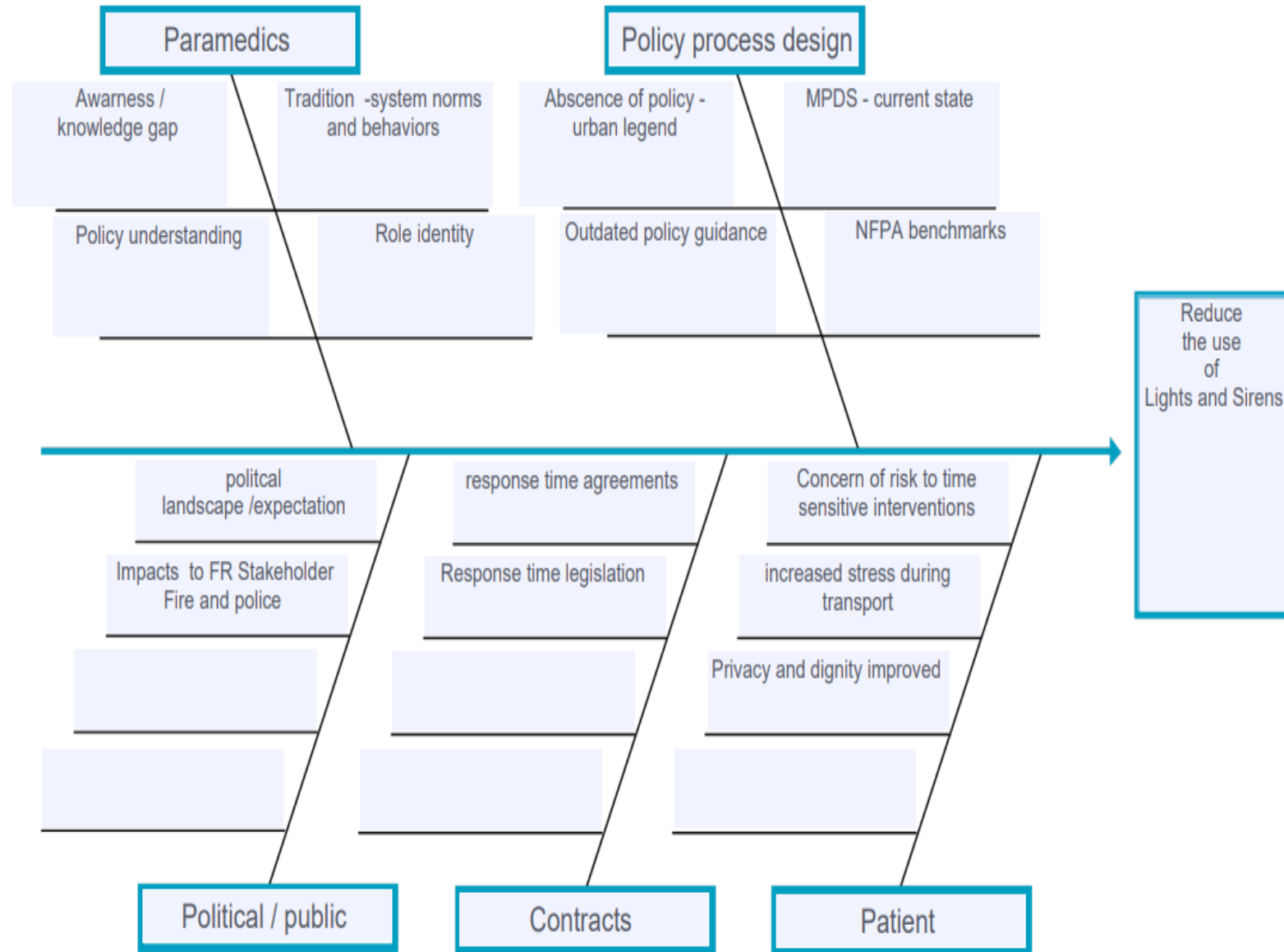
Appendix :

Fishbone

Driver Diagram

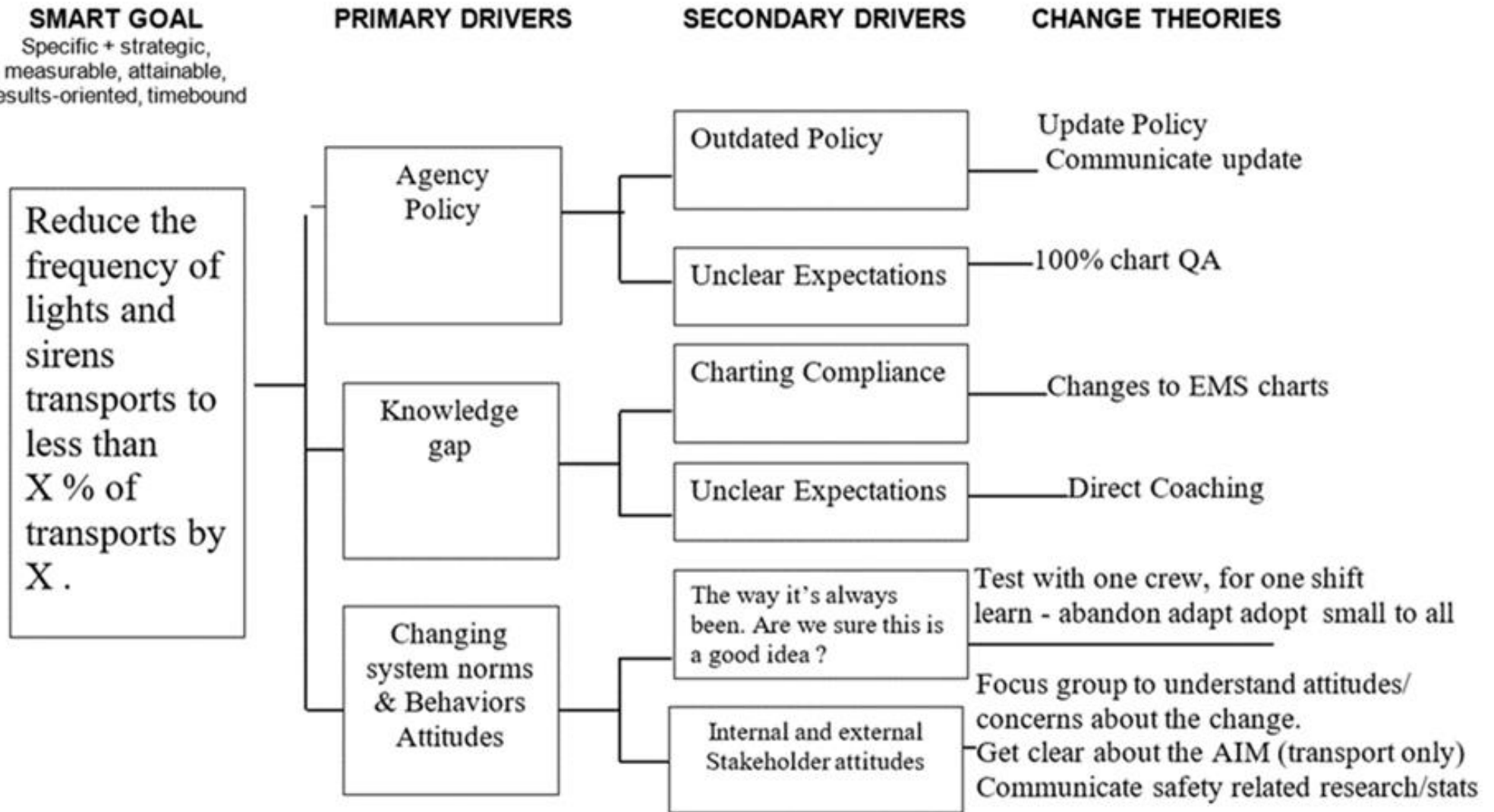
Change ideas

Fishbone



Driver Diagram

SMART GOAL
 Specific + strategic,
 measurable, attainable,
 results-oriented, timebound



Friction , Fuel and urban legends..

Change ideas

- Close knowledge gaps if identified (urban legends)
- Give crew discretion to reduce L & Sirens use during transport – life and limb saving only
- Go right now , just not with L & S
- MPDS /CTAS (3 4 5) match – one MDP at a time
- MPDS/CTAS (all) /OUTCOMES – set targets for response
- In tiered systems send ONLY closest unit L & S- upgrade others if required
- Policy change, clinical protocol change
- Work to change system norms, behaviors and attitudes

References

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2. The Model for Improvement <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx>.
3. Kupas DF. Lights and siren use by emergency medical services: Above all, do no harm. National Highway Traffic Safety Administration. 2017. Available online at [https://www.ems.gov/pdf/Lights and Sirens Use by EMS May 2017.pdf](https://www.ems.gov/pdf/Lights_and_Sirens_Use_by_EMS_May_2017.pdf)
4. National EMS Quality Measure Set <https://www.nemsqa.org/completed-quality-measures/> National EMS Quality Alliance
5. [Quality Improvement Essentials Toolkit | IHI - Institute for Healthcare Improvement](#)