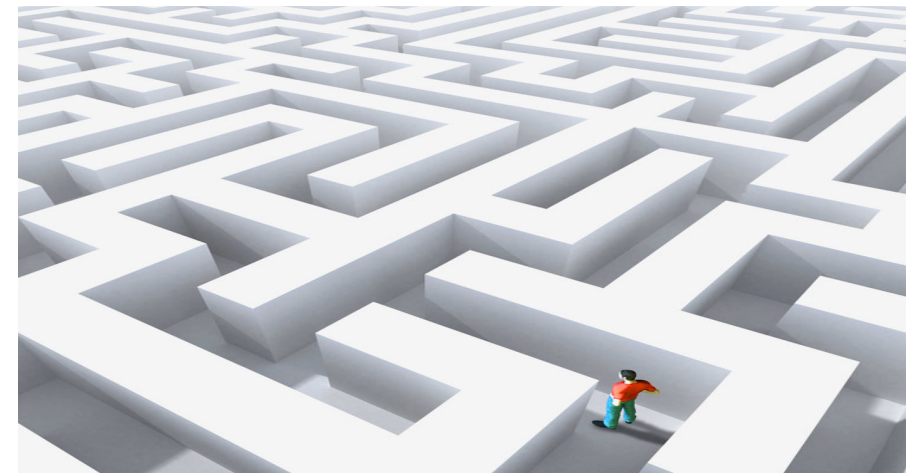


Mr Charles 1: the call

- *Mr. Charles is 86 years old , has been affected by dementia for more than ten years, he is often confused, anxious and mentally disturbed*
- *He is suffering from hypertension, chronic heart failure, type 2 diabetes mellitus NID(Not Insulin Dependent) well controlled, 1 year ago he was catheterized due to Benign prostatic hypertrophy and his nurse changes his catheter every 15 days.*
- *He is cared for by his wife, 80 years old, and by his sons who take turns caring for him every week.*
- *They call me for a home visit because Mr. Charles has been running a temperature of 37.8 degrees celsius for two days, he is also coughing and agitated.*

These symptoms should immediately start running the clinical engine:

- Hypothesis generation
-

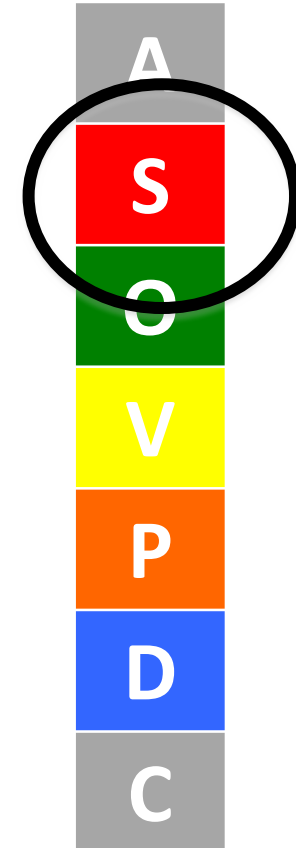


Mr. Charles 2: at home

The wife:

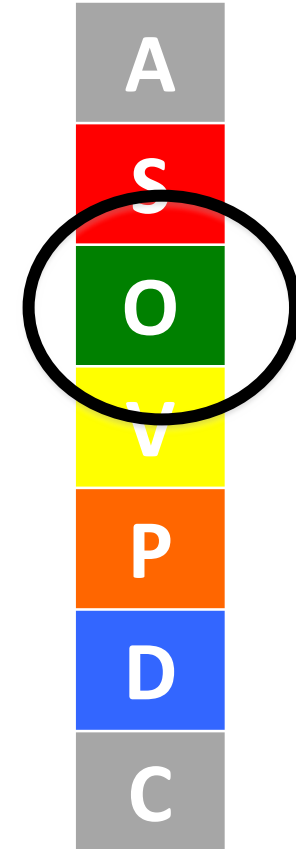
- *“Even if he were affected by a severe illness I wouldn’t want to admit him to the hospital”*
- *“After all these years I want him at home. You know the sacrifices I have made to take care of him at home.”*
- *“But if you, doctor, decides that he has to go to the hospital I will obey!”*

- Information gathering, with particular attention about ideas, concern and expectations (ICE) of the care giver, useful to know patient preferences



Mr. Charles 3: physical examination

- *Respiration rate: 26-28 per min*
- *Pulse: 100 per min*
- *BP: 115/60*
- *Thorax:*
 - *Palpation : Restricted expansion of the lower part of the right thorax.*
 - *Auscultation – basal crackles heard in the Right lung.*
- *Abdomen: normal*
- *The patient has swollen legs but they are not more swollen than they were in the past.*
- *Patient is more confused and agitated*



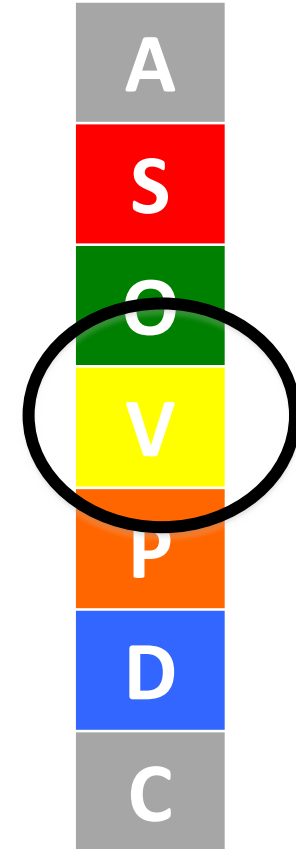
Mr. Charles 4: evaluation of core risk

On examination:

- **C**onfusion
- **R**espiration rate: 26-28 per min
- **B**P: 115/60
- Sp **O**2: 92%

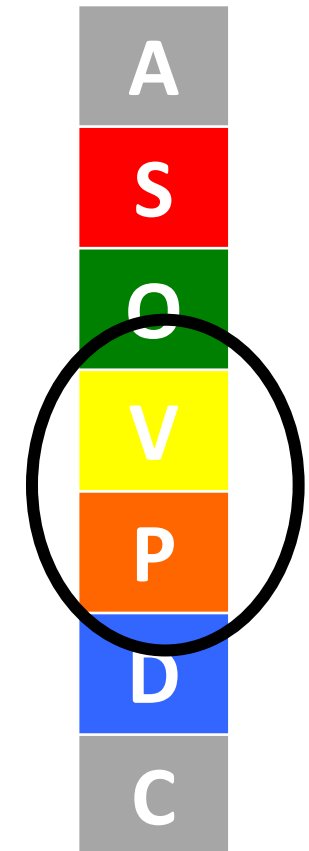
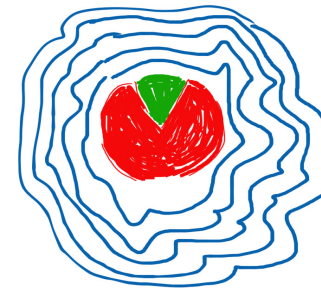


*I evaluate the patient with the CRB65 score :
The risk is intermediate*



Mr. Charles 5: evaluation of uncertainty cloud

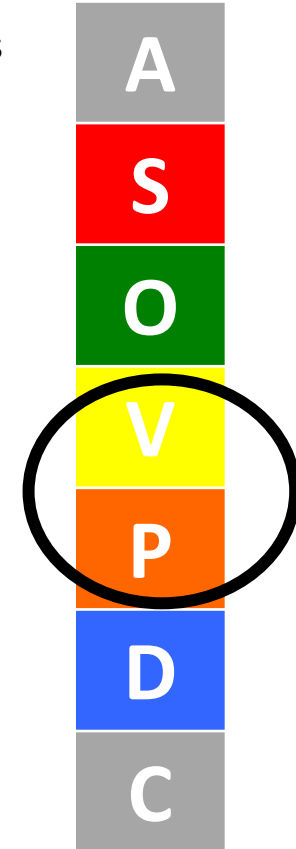
- *The doctor explores the options:*
- *To send the patient to the hospital*
 - *Cons: wife absence, high risk of nosocomial infections, advanced will expressed by the patient and preferences of the caregiver*
 - *Pros: higher safety for the patient*
- *To keep the patient at home*
 - *Cons: higher risk to die*
 - *Pros: higher quality of life, respect of advanced wi*



Mr. Charles 6: principles and values

- *Am I able to take responsibility to keep the patient at home respecting values of quality of life and advanced will and not life extension?*

- The doctor tests compatibility between the course of action and his her principles and values
- The advanced will of the patient and quality of life against life extension
- Principles and values serve to internally generate candidate goals and plans for possible adoption, and they guide decisions about externally generated candidate goals and plans.
- *Lee Roy Beach (1993), "Image Theory: an Alternative to Normative Decision Theory", in NA Advances in Consumer Research Volume 20, eds. Leigh McAlister and Michael L. Rothschild, Provo, UT : Association for Consumer Research, Pages: 235238.*



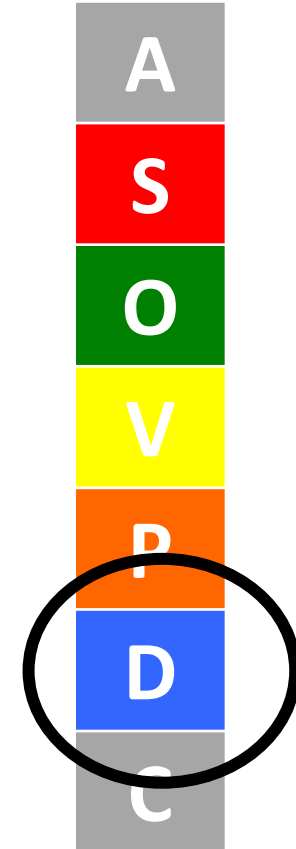
Mr. Charles 7: choice

Am I able to take responsibility to keep the patient at home respecting values of quality of life and advanced will and not life extension?

Yes!

And I keep the patient at home

The doctor choose



Decision good enough?



What is a complex scenario in GP?

1. High risk for the patient if you don't make any the intervention
2. High uncertainty of the outcome (many determinants of the enviroment, many actors involved, low knowledge about disease evolution, **more than an option, decision instability**)
3. High interference of preferences of the patient, principles and values

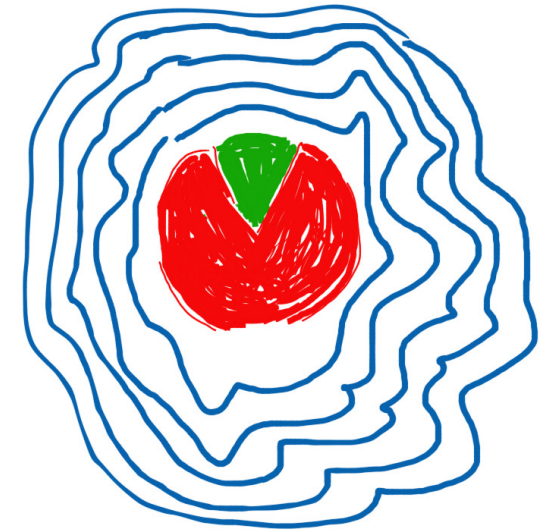
What kind of patient?

- Mr. Charles
- Patient with dementia caring upon payment by a foreign caregiver, with the first episode of dysphagia and temperature
- Terminally ill patient

“patient care requires offering a service that is actually suitable for the person as a whole, that is, as far as possible, to respond to his / her physical needs, his / her pathophysiological situation, but also to his / her psychological expectations and emotional needs”
(Luciano Vettore)

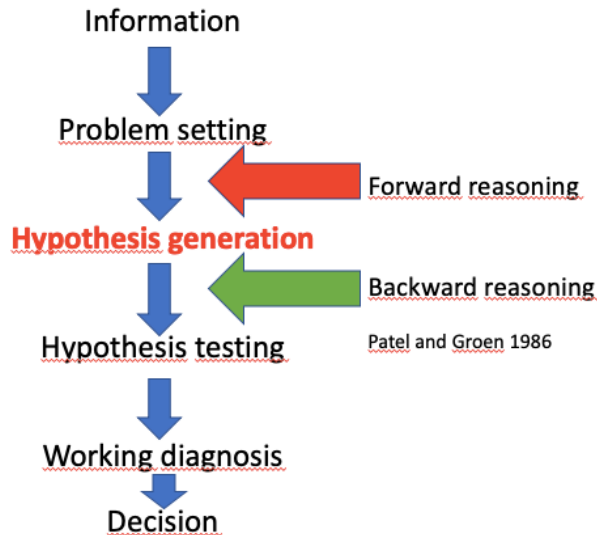
DECISION MAKING STEPS:

- Information gathering
 - Clinical situation
 - ideas, concern and expectations (ICE) of the care giver, useful to know patient preferences
- Assess risk with analytic tools
- Evaluate the cloud of uncertainty of the outcome
- Tests compatibility between the course of action and your principles and values



1 Assess risk...Analytic tools

Elstein e Schwarz



Does This Patient Have Community-Acquired Pneumonia?

Diagnosing Pneumonia by History and Physical Examination

Joshua P. Metlay, MD, PhD; Wishwa N. Kapoor, MD, MPH; Michael J. Fine, MD, MSc

NICE National Institute for Health and Care Excellence

NICE guideline

Should patients with CAP be admitted to hospital?

Once a diagnosis of CAP has been made, guidelines recommend that antibiotics should be administered [22]. The pertinent question for the primary care physician remains whether or not the patient should continue to be managed in the community or admitted to hospital. In the UK, approximately 20% of patients with CAP are admitted to hospital [22], and this decision needs to take into account the patient's severity of illness, comorbidities and risk factors for a poorer outcome, in addition to social factors. Fortunately, severity of illness is characterised by perturbations in a number of simple physiological measures, which can be easily assessed by clinical examination [67]. Guidelines recommend that clinical judgement of the general practitioner may be supplemented by severity assessment tools [22]. In primary care, the simplest and most practically applied severity assessment tool is CRB65 (tables 1 and 2), which is used to predict 30-day mortality in CAP patients [68, 69]. This tool uses a single point for the presence of confusion, age greater than 65 years, and abnormalities in respiratory rate and blood pressure to stratify patients into risk groups. Alternative severity assessment tools, such as CURB-65 (confusion, urea >7 mmol·L⁻¹, respiratory rate ≥30 breaths·min⁻¹, blood pressure <90 mmHg systolic or ≤60 mmHg diastolic), CURB65 (CURB plus age ≥65 years) and the Pneumonia Severity Index (PSI), all perform well but have the disadvantage of incorporating laboratory measurements that are frequently unavailable at the first consultation in primary practice [69].

One needs to be aware that CRB65 originated to describe 30-day mortality in patients admitted to hospital with CAP, rather than being derived from patients in the community with CAP, some of whom may have been admitted to hospital, and this may be a limitation of this tool. Furthermore, as CRB65 uses parameters with a threshold, it is likely to be

Table 1. CRB65 severity assessment tool

Score one point for each of the following
C: confusion (acute)
R: respiratory rate ≥30 breaths·min ⁻¹
B: blood pressure <90 mmHg systolic or ≤60 mmHg diastolic
65: age ≥65 years

Pneumonia in adults: diagnosis and management

2. Evaluate the uncertainty cloud... Wider shot....



Ecological rationality

Gigerenzer Muir Gray 2011

Biopsychosocial model

Engel 1987

Patient orientation

McWhinney 1989

3. Decisions are always value-driven

- *Am I able to take responsibility to keep the patient at home respecting values of quality of life and advanced will and not life extension?*

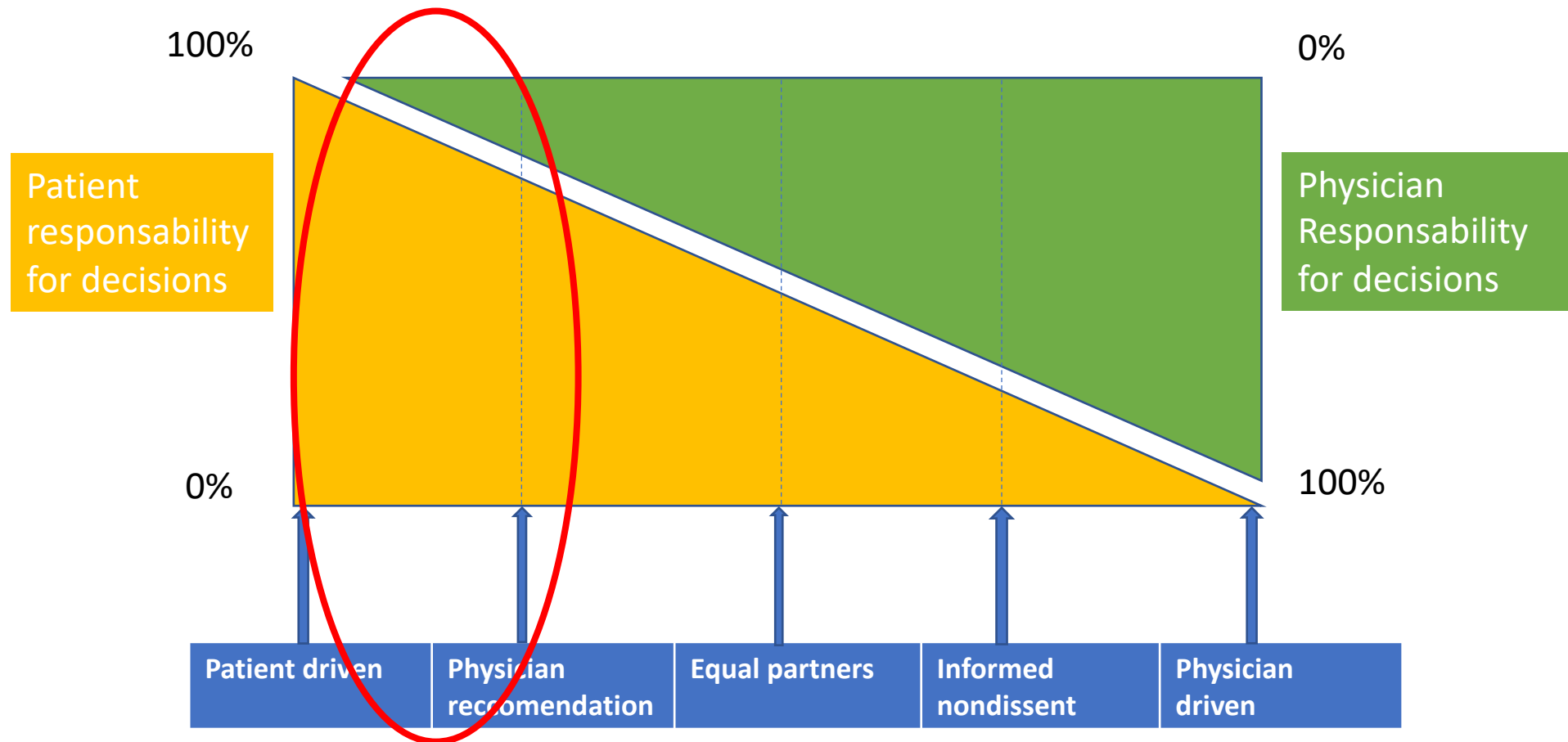
Two options! How to decide?

Two options! How to decide?

WITH THE PATIENT!

The shared decision-making continuum

da: Kon AA. The shared decision-making continuum. *JAMA - J Am Med Assoc.* 2010;304(8). doi:10.1001/jama.2010.1208. (modificato)



Acute Chest Pain Dysuria COVID diagnosis

SCENARIO

COVID treatment

Complex elderly

LOW UNCERTAINTY

HIGH UNCERTAINTY

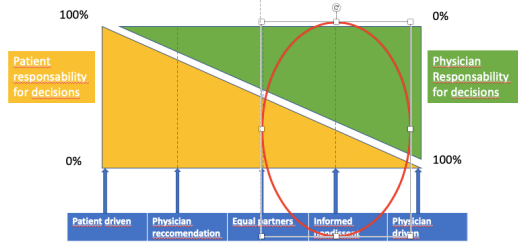
Procedure

Guideline
Classic clinical reasoning
Clinical prediction rules

*Tools and methods
For the decision*

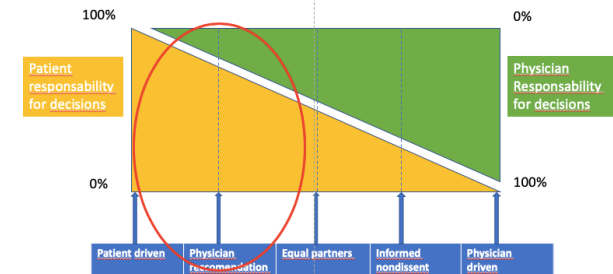
Risk assessment through clinical prediction
rules + fast and frugal heuristic
strategies/ecological view/ /patient
preferences/values

Only one option



I
C – informed non dissent
E – ethical/negotiation

Several options



I
C – to be involved
E – opportunity

SDM

*Information
Consent
Engagement*

Physician on charge---- chosen doctor

Professional

Chosen physician

No plan-----10 minutes

Planned consultation length

20 minutes or more