

# COMPGUIDE

Ontologia para Guias Clínicas Interpretáveis por Computador —

Contextualização [1]

"Declarações definidas de modo sistemático, de forma a apoiar a tomada de decisão, por parte do profissional e do paciente, acerca da adequação dos cuidados de saúde a circunstâncias clínicas específicas." [1]

Institute of Medicine. Clinical Practice Guidelines. Washington: National Academy Press, 1990.

Contextualização [2]



**PLANEAMENTO** 

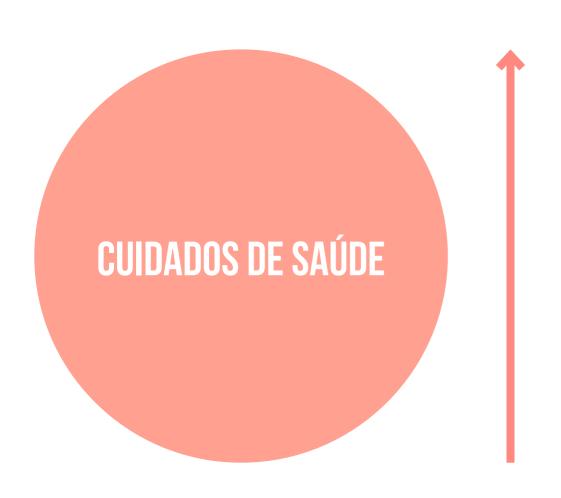
COORDENAÇÃO

**MONITORIZAÇÃO** 

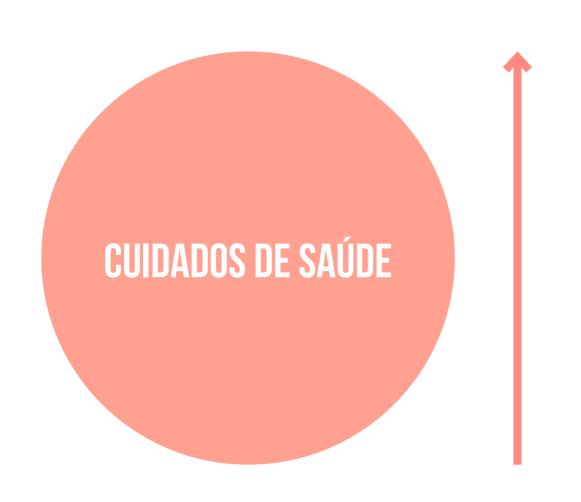
**DOCUMENTAÇÃO** 

**REVISÃO** 

Contextualização [2]



Contextualização [2]

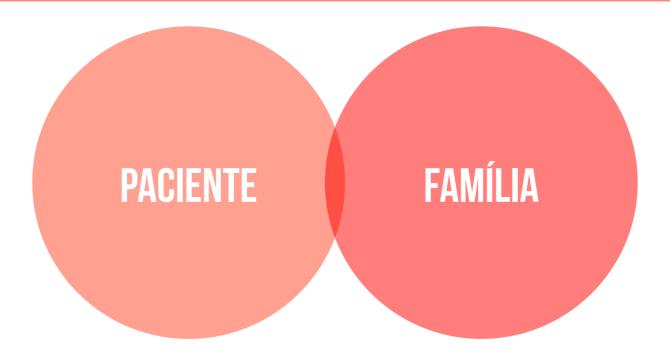


**DESENVOLVIMENTO** 

**IMPLEMENTAÇÃO** 

DISSEMINAÇÃO







#### **Cuidados Paliativos**

"(...) gestão eficaz da dor e de quaisquer sintomas desconfortáveis, incorporando ainda cuidados psicossociais e espirituais que sejam conformes às necessidades, valores, crenças e cultura do paciente e da sua família." [3]

NCCN. Clinical Practice Guidelines in Oncology — Palliative Care. Version 2.2012.















Destinatários da Guia Clínica



Destinatários da Guia Clínica

#### **FASE INICIAL**

Equipa Oncológica Primária.



Destinatários da Guia Clínica

#### **FASE INICIAL**

Equipa Oncológica Primária.

#### **FASE POSTERIOR**

— Equipa Multidisciplinar de Especialistas em Cuidados Paliativos.



Organização da Guia Clínica

#### **ACÇÕES EM VIDA**

### **ACÇÕES PÓS-MORTE**

Organização da Guia Clínica

### ACÇÕES PÓS-MORTE



Organização da Guia Clínica

### ACÇÕES EM VIDA



Apoio Social e Gestão de Recursos



Organização da Guia Clínica

### ACÇÕES EM VIDA



Planeamento de Cuidados Avançados



Organização da Guia Clínica

### ACÇÕES EM VIDA



— Factores I Prestação de Cuidados



Organização da Guia Clínica

### **ACÇÕES EM VIDA**



ACP

CF

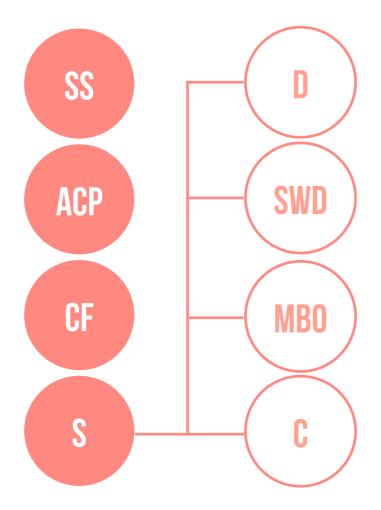
S

Sintomas



Organização da Guia Clínica

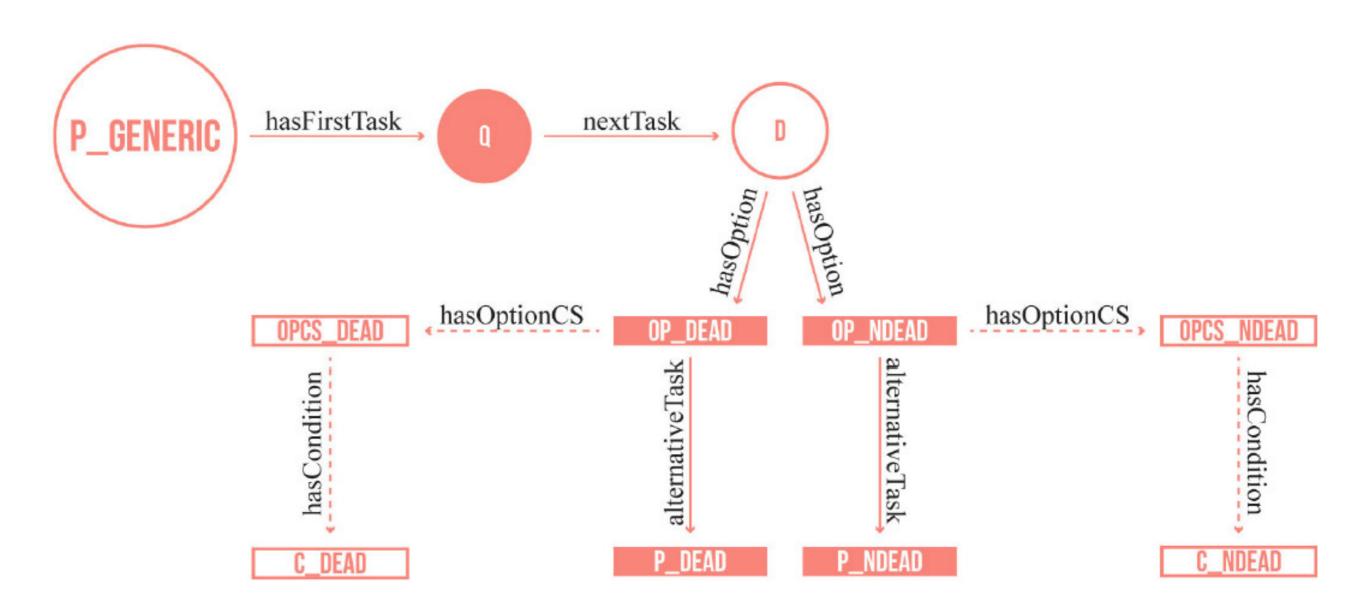
### **ACÇÕES EM VIDA**





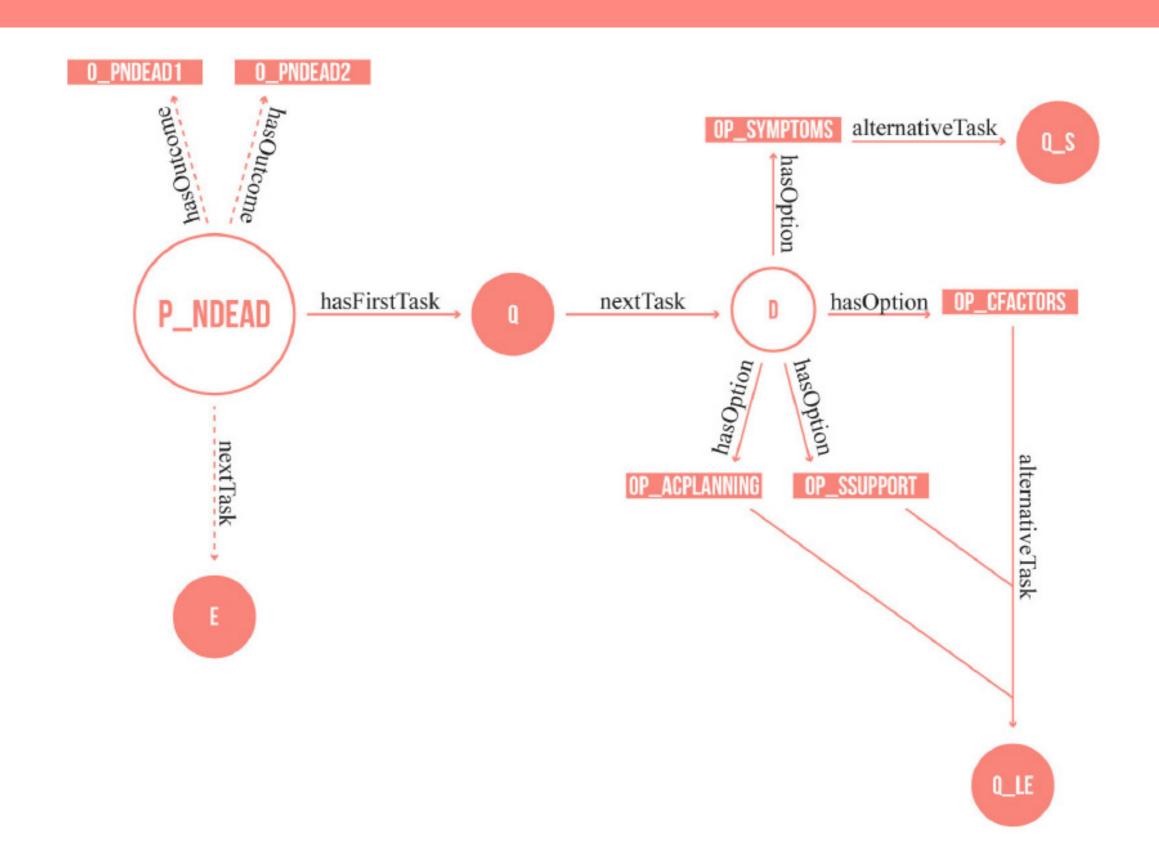
## **REPRESENTAÇÃO**

Da Guia Clínica à Ontologia

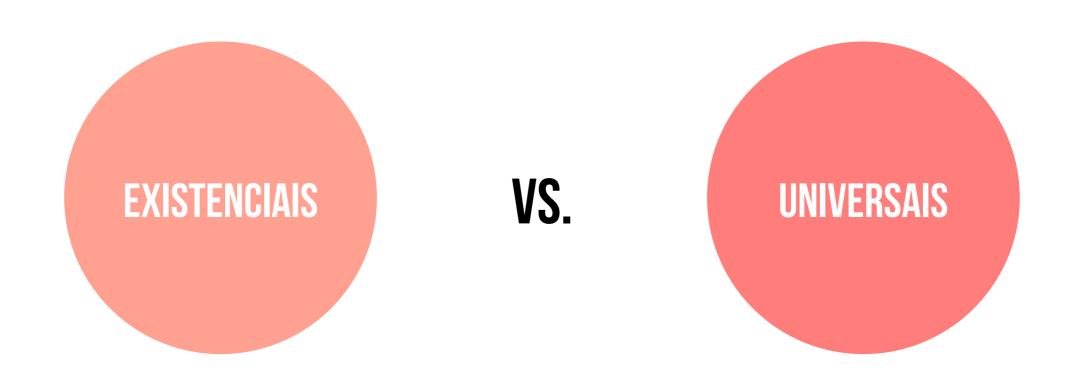


# REPRESENTAÇÃO

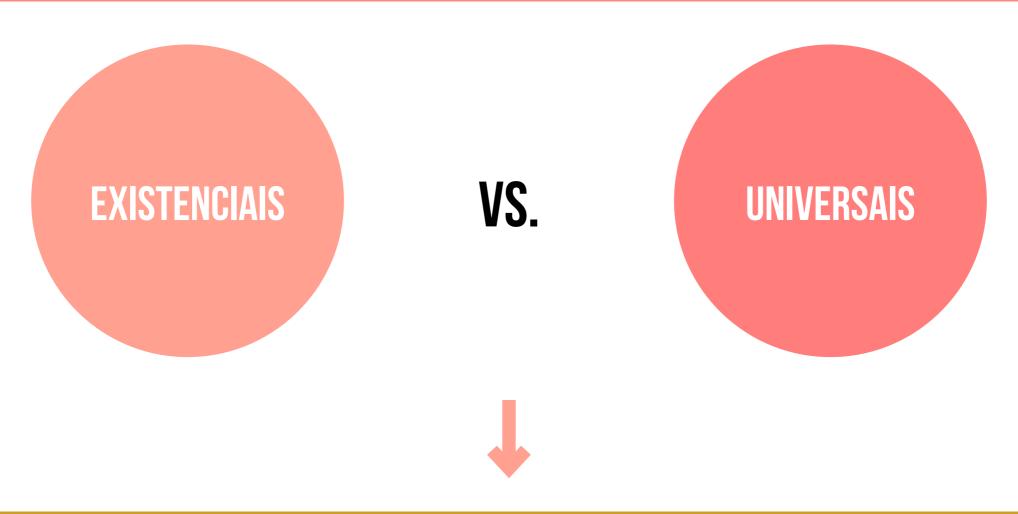
Da Guia Clínica à Ontologia

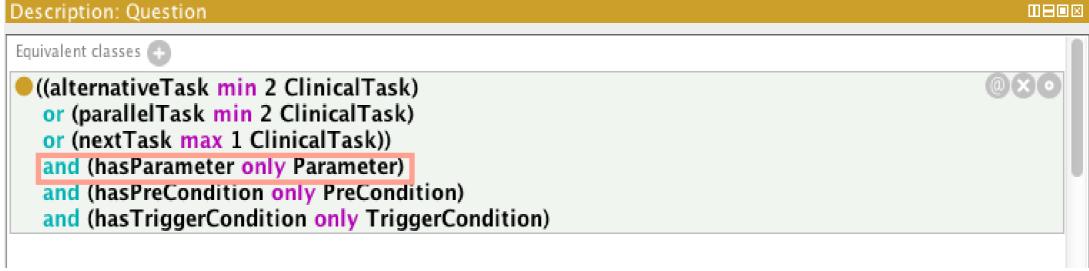


# **ALTERAÇÕES**Classe Question | Restrições

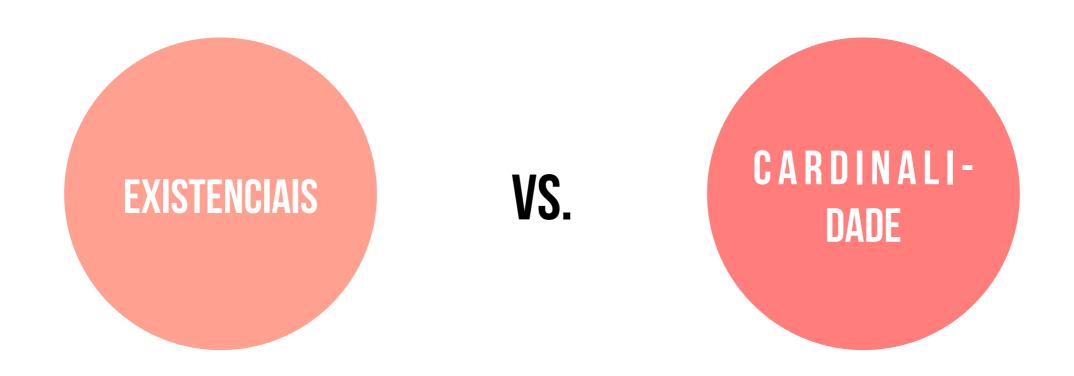


Classe Question | Restrições

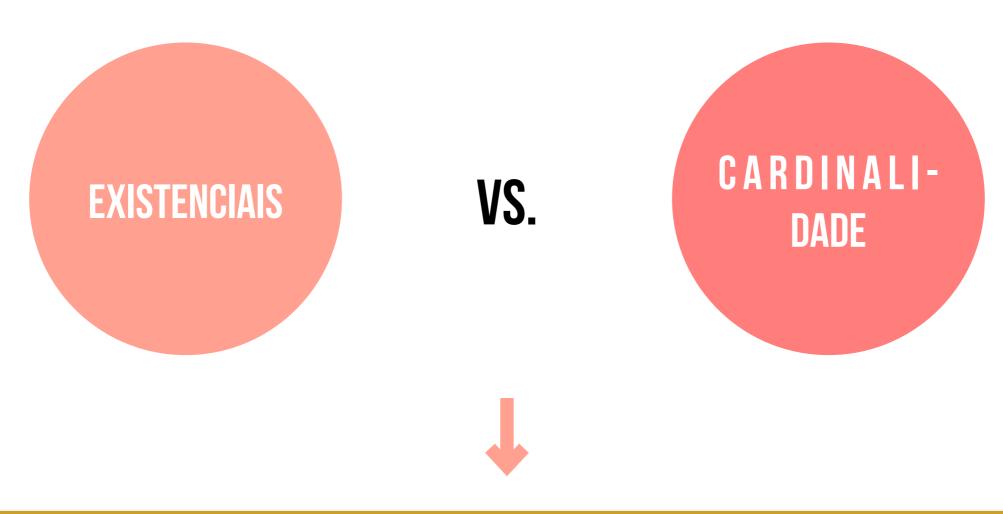


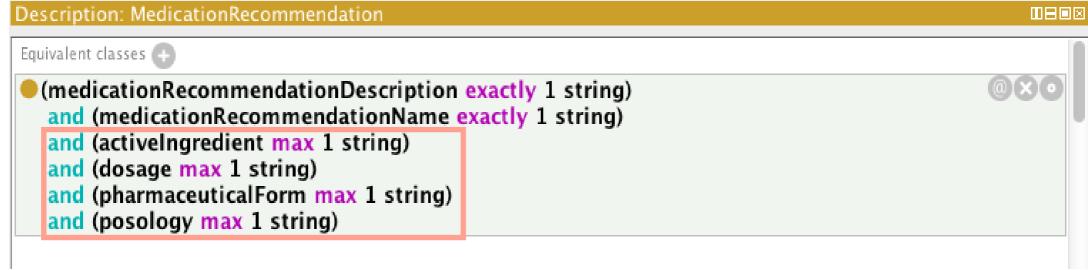


Classe MedicationRecommendation | Restrições



Classe MedicationRecommendation | Restrições





Classe Procedure I Propriedades de Dados



(procedureClass max 1 string)

#### Classe Procedure I Propriedades de Dados



(procedureClass max 1 string)

#### For family and caregiver(s)

- Immediate after-death care:
- Provide the family time with the body
- Remove tubes, drains, lines, and the foley catheter unless an autopsy is planned
- Inform family (if not present) of death
- Ensure culturally sensitive, respectful treatment of the body
- Address survivor concerns about organ donation and/or autopsy
- File the death certificate, complete forms, and provide necessary information for the funeral director
- Offer condolences
- > Inform other health care providers of the patient's death
- Bereavement support:
- Formally express condolences on the patient's death (eg, card, call, letter)
- Refer to appropriate bereavement services within the institution or in the community
- Attend a debriefing meeting with the family if they desire one
- Discuss cancer risk assessment and modification with family members
- Identify family members at risk for complicated bereavement or prolonged grief disorder
   For health care professionals

#### General support

- · Legitimize discussion of personal issues that impact patient care
- Create a climate of safety for discussion of patient deaths
- Provide regular opportunities for reflection and remembering for staff through a memorial ritual

- · Review medical issues related to the patient's death
- ➤ Explore concerns and questions regarding quality of patient care
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(procedureClass max 1 string)

#### IMMEDIATE AFTER DEATH CARE

**BEREAVEMENT SUPPORT** 

**GENERAL SUPPORT** 

**AFTER DEATH SUPPORT** 

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(procedureTarget max 1 string)

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(procedureTarget max 1 string)

**FAMILY AND CAREGIVER(S)** 





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Classe Procedure I Propriedades de Dados



(procedureDetail only string)

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(procedureDetail only string)

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#### Classe Procedure I Propriedades de Dados



(procedureDetail only string)

**ACÇÃO PRINCIPAL** 

**DETALHE DA ACÇÃO** 



#### For family and caregiver(s)

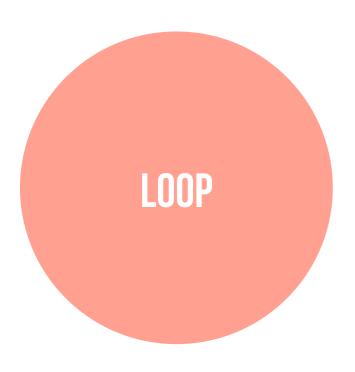
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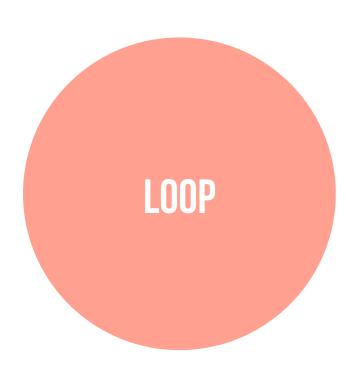
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# **ALTERAÇÕES**Classe Condition



(hasLoop only Loop)

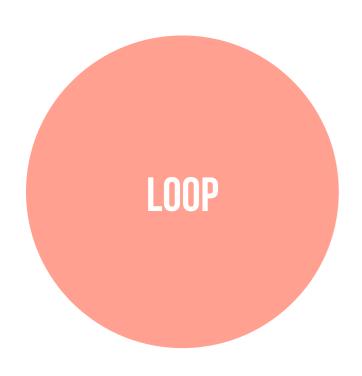
## **ALTERAÇÕES**Classe Condition



(hasLoop only Loop)

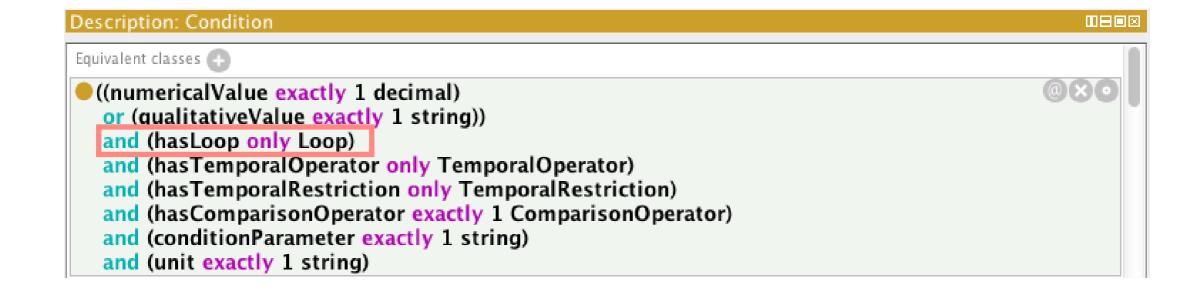
 Add and titrate bisacodyl 10-15 mg daily-tid with a goal of 1 non-forced bowel movement every 1-2 days

**Classe Condition** 

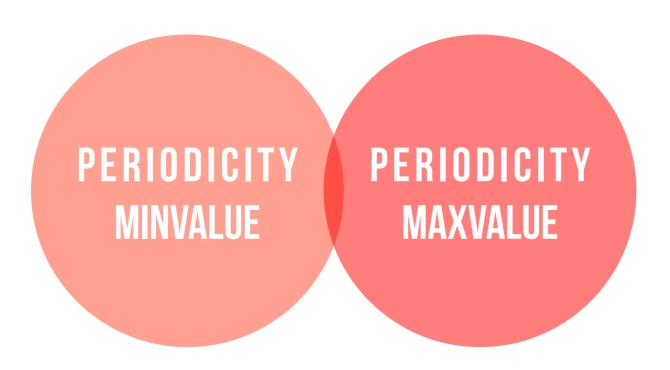


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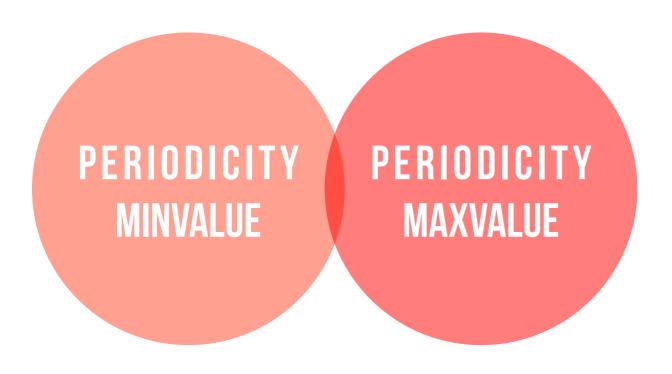


Classe Periodicity | Propriedades de Dados



(periodicityMinValue exactly 1 decimal) and (periodicityMaxValue exactly 1 decimal)

Classe Periodicity | Propriedades de Dados





#### Description: Periodicity

Equivalent classes 🚯



(((periodicityMaxValue exactly 1 decimal) and (periodicityMinValue exactly 1 decimal)) or (periodicityValue exactly 1 decimal)) and (hasTemporalUnit exactly 1 TemporalUnit)



**ALTERAÇÕES**Classe Action | Propriedades de Objectos



Classe Action I Propriedades de Objectos



 Rule out obstruction (physical exam, abdominal x-ray/consider Gl consult)

Classe Action I Propriedades de Objectos



 Rule out obstruction (physical exam, abdominal x-ray/consider GI consult)



**RULE OUT OBSTRUCTION** 

**PHYSICAL EXAM** 

**ABDOMINAL X-RAY** 

**CONSIDER GI CONSULT** 

Classe Action I Propriedades de Objectos



 Rule out obstruction (physical exam, abdominal x-ray/consider GI consult)



Acção Principal

**RULE OUT OBSTRUCTION** 

Acções Complementares

**PHYSICAL EXAM** 

**ABDOMINAL X-RAY** 

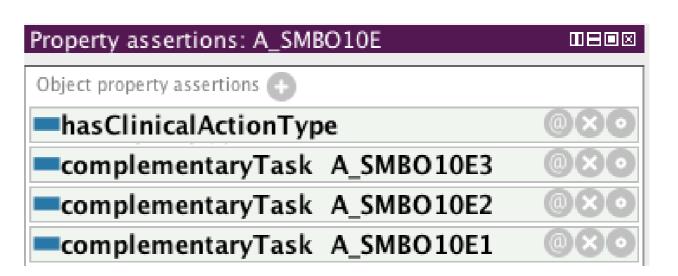
**CONSIDER GI CONSULT** 

# ALTERAÇÕES Annotations



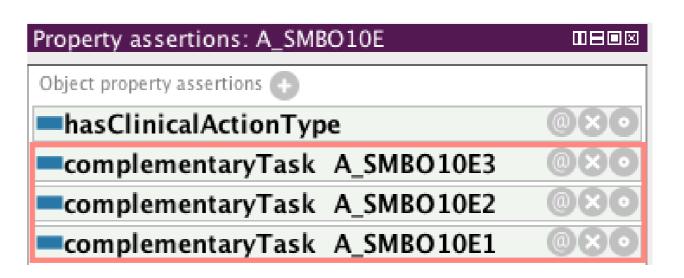
**Annotations** 





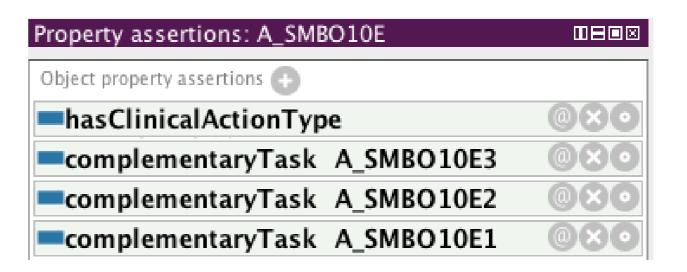
**Annotations** 



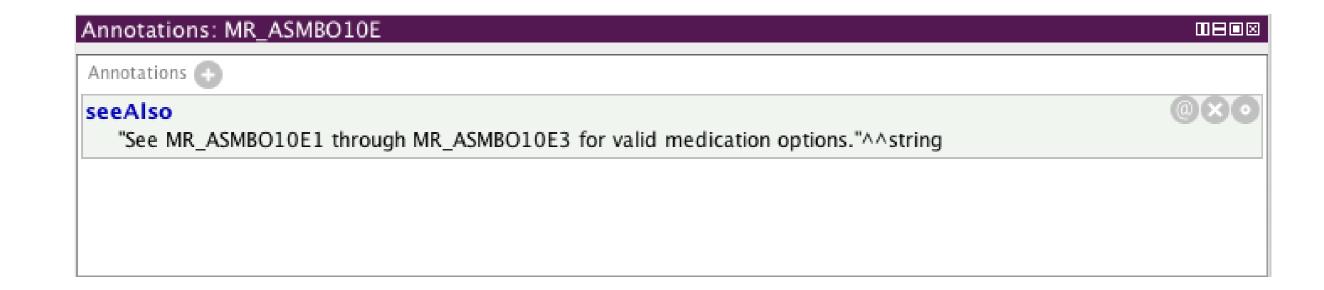


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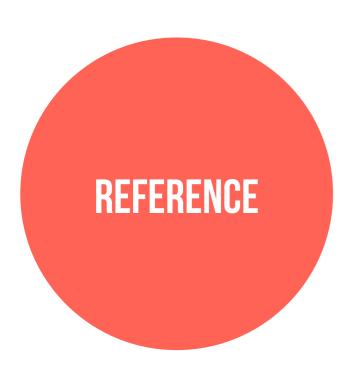




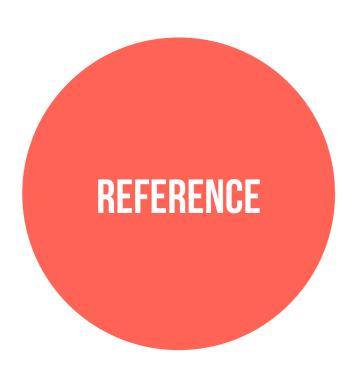




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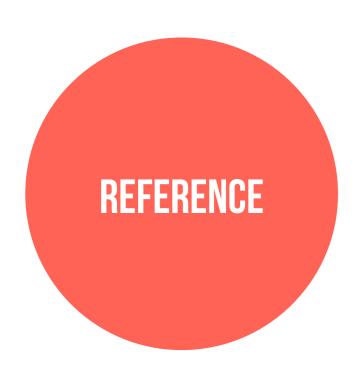
**Annotations** 



#### ▶ Insomnia:

- Zolpidem, 5-10 mg PO at bedtime
- Lorazepam, 0.5-1 mg PO at bedtime
- Trazodone, 25-100 mg PO at bedtime
   Mirtazapine<sup>p</sup>,7.5-30 mg PO at bedtime

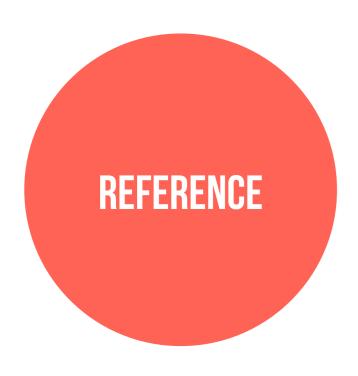
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#### Annotations: MR\_ASSWD6D



Annotations 🔠

#### reference



"Kim SW, Shin IS, Kim JM, Kim YC, Kim KS, Kim KM, Yang SJ, Yoon JS. Effectiveness of mirtazepine for nausea and insomnia in cancer patients with depression. Psychiatry Clin Neurosci 2008;62:75-83."^^string

Classe TemporalOperator

### NEVER\_IN\_THE\_PAST

 Presença de um sintoma, no decorrer do período de observação, nunca observado anteriormente.

Classe TemporalOperator

### **NEVER\_IN\_THE\_PAST**

 Presença de um sintoma, no decorrer do período de observação, nunca observado anteriormente.

#### If constipation is present:

- Assess for cause and severity of constipation
- Rule out impaction, especially if diarrhea accompanies constipation (overflow around impaction)
- Rule out obstruction (physical exam, abdominal x-ray/consider GI consult)
- Treat other causes (eg, hypercalcemia, hypokalemia, hypothyroidism, diabetes mellitus, medications)
- Add and titrate bisacodyl 10-15 mg daily-tid with a goal of 1 non-forced bowel movement every 1-2 days
- If impacted:
- Administer glycerine suppository ± mineral oil retention enema
- Perform manual disimpaction following pre-medication with analgesic ± anxiolytic

#### If constipation persists:

- Reassess for cause and severity of constipation
- Recheck for impaction or obstruction
- Consider adding other laxatives, such as bisacodyl (one suppository rectally daily-bid); polyethelene glycol (1 capful/8 oz water bid); lactulose, 30-60 mL bid-qid; sorbitol, 30 mL every 2 h x 3, then prn; magnesium hydroxide, 30-60 mL daily-bid; or magnesium citrate, 8 oz daily
- Consider methylnaltrexone for opioid- induced constipation, 0.15 mg/kg SC every other day, no more than once a day
- Tap water enema until clear
- Consider use of a prokinetic agent (eg, metoclopramide, 10-20 mg PO qid)

Classe TemporalOperator

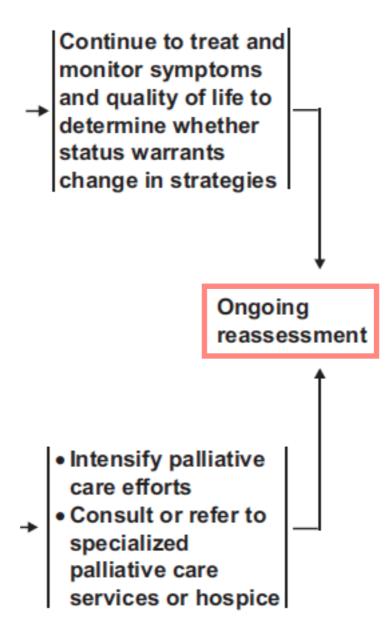
### **ONGOING**

Acção associada à ideia de continuidade.

Classe TemporalOperator

### **ONGOING**

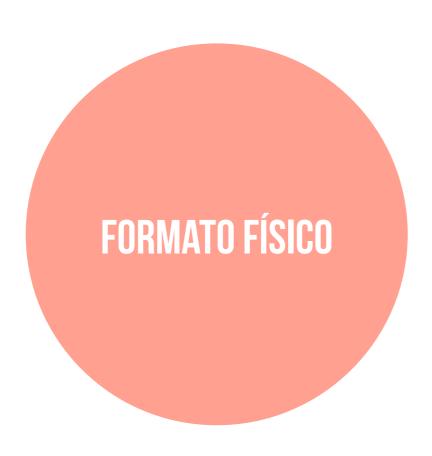
Acção associada à ideia de continuidade.



# APRECIAÇÃO CRÍTICA

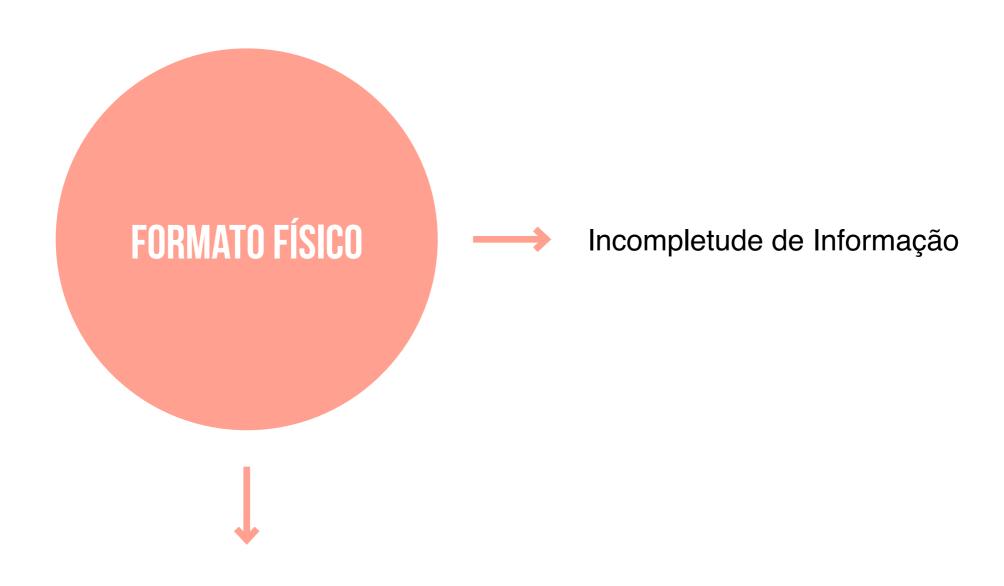
### **DIFICULDADES**

Implementação da Guia Clínica



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Implementação da Guia Clínica



Flutuações de Representação

### **COMPARAÇÃO**

Formato Físico vs. Ontologia

### FORMATO FÍSICO

- Estrutura com flutuações.
- Restrições apenas detectáveis através da leitura extensiva da guia clínica.
- Maior capacidade de representação da subjectividade inerente à prática clínica.

### **ONTOLOGIA**

- Estrutura rígida e hierarquizada.
- Possibilidade de restrição dos métodos de actuação.
- Dificuldade em lidar com a representação da subjectividade inerente à prática clínica.
- Padronização da representação.
- Utilização de um *reasoner*, que garante a consistência da representação.
- Possibilidade de adaptação a SADs.

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# FIM