Semantic Discovery of Medical Advice Services with Glue

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A **General Practitioner** needs a **Medical Advice** service

A **call center** maintains the **list of** the **available specialists** with *medical capabilities* and *agenda*

Understands the medical problem and **books a meeting** between the GP and the most suitable specialist

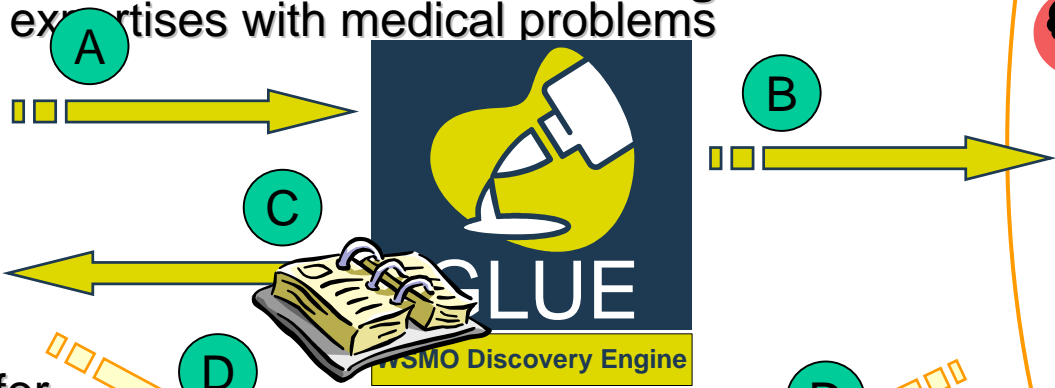**Specialists** available for advice services
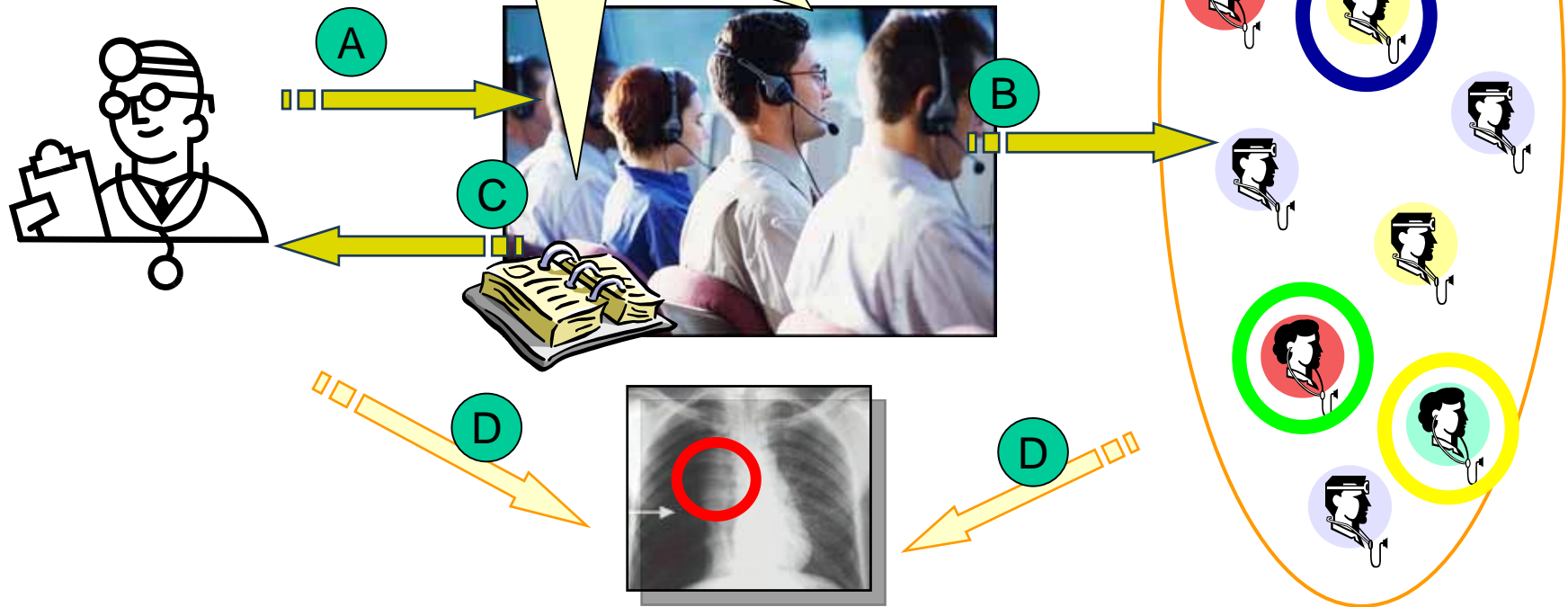
Web Services Semantic Discovery

Each specialist exposes the up-to-dated **agenda through a web service**. The GP will book a virtual meeting through this web service

http://...?wsdl
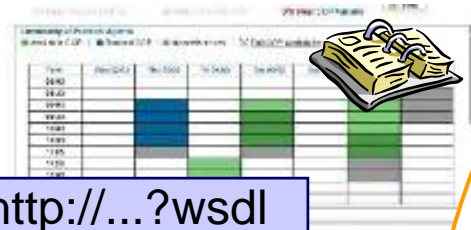
Glue is configured with an **ontology that models the medical domain** and **rules for matching** medical expertises with medical problems

A

B

C

GLUE

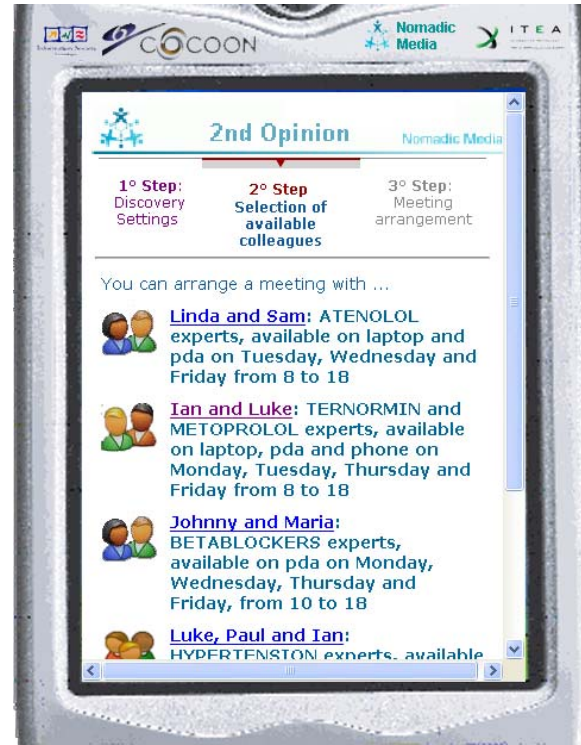**WSMO Discovery Engine**

D

D

The GP asks for an Advice service
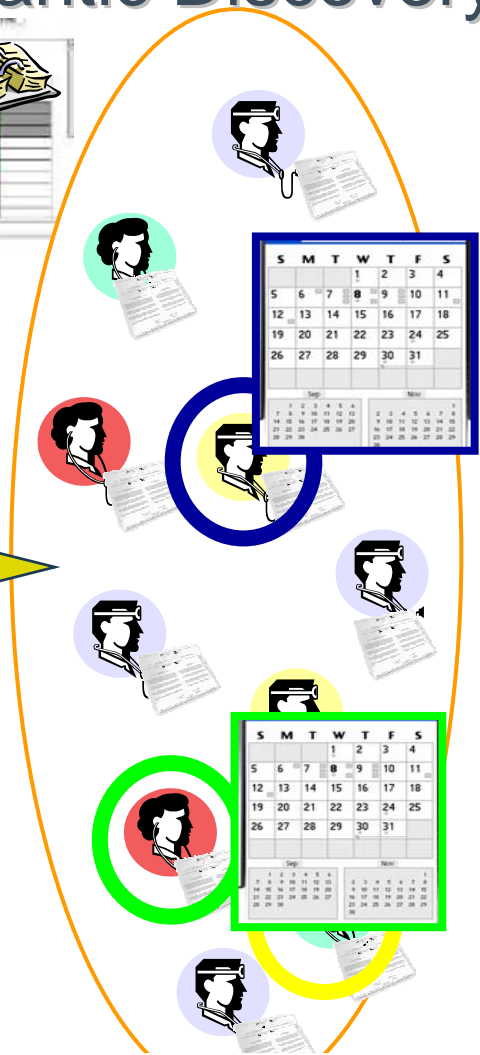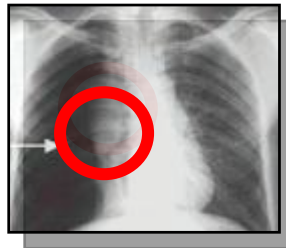
Each specialist **describes** his/her specialities and **medical capabilities** with a week-based available dates *(e.g.: caridologist with expertises in hypertension available on Monday morning and Thursday afternoon)*

DEMO: A use case in the healthcare field

1. Open
   http://glue.cefriel.it/glueclient/

2. Write "atenolol" in the problem text area, choose a date and submit

2. A list of services for arranging a meeting with some specialists is retrieved

3. Choose one of the service retrieved

4. If no slot is currently available you can go back to the list of results and choose a different service

2nd Opinion — Nomadic Media

1° Step: Discovery Settings
2° Step: Selection of available colleagues
3° Step: Meeting arrangement

You can arrange a meeting with …

Linda and Sam: ATENOLOL experts, available on laptop and pda on Tuesday, Wednesday and Friday from 8 to 18

Ian and Luke: TERNORMIN and METOPROLOL experts, available on laptop, pda and phone on Monday, Tuesday, Thursday and Friday from 8 to 18

Johnny and Maria: BETABLOCKERS experts, available on pda on Monday, Wednesday, Thursday and Friday, from 10 to 18

Luke, Paul and Ian: HYPERTENSION experts, available

■ ... to Atenolol

– e.g., "*Hypertension*" because "*atenolol*" is a drug of type "Beta blocker" that as any "blocker" is used for controlling Hypertension