Chronic patients management in family medicine in Slovenia

Impact of practice nurse to chronic care work

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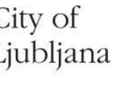
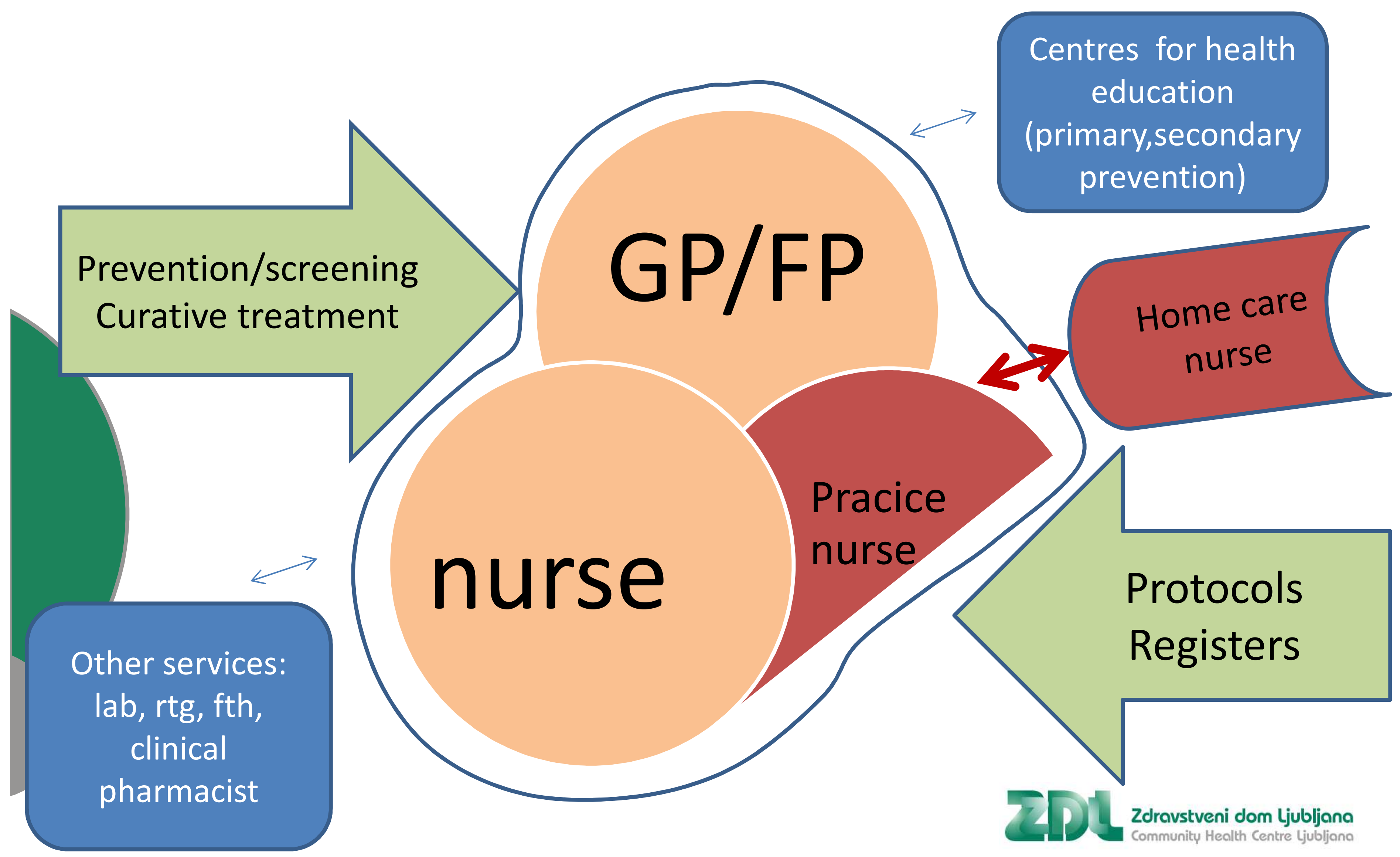


Facts:

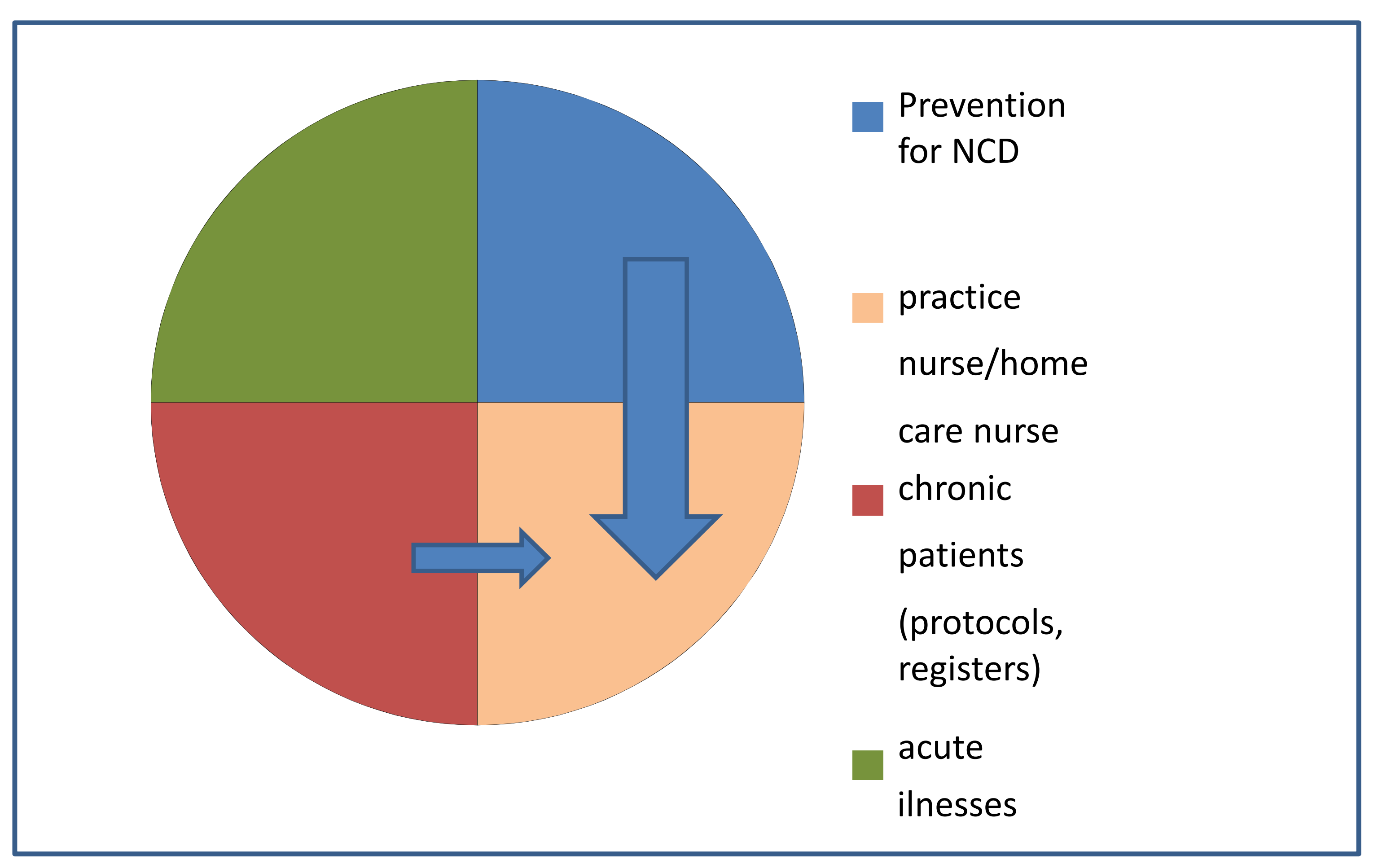
- **To many** patients a day visit a GP (≈ 50)
- Patients **fail on very simple things**: inappropriate lifestyle and therapy using, non-adherence, no self treatment, …
- Practice nurses (diploma graduated nurses) can **educate** patients and **takeover** some **workload** in accordance with their competencies
- GPs/FPs will have **more time** for every individual patients
- implement **systematic** work: preventive screening, chronic patients management (protocols, registers)

Team in FPs in CHC Ljubljana :



Redistribution of work-load

FMP-team (GP + nurse + *0,5 FTE practice nurse (+ home care nurse)*)



What had to be done?

- **Practice nurses**: additional education (modules for **8 chronic** diseases, moduls for **preventive** care and **work organisation**)

- **Protocols for preventive screening**
- **Protocols for chronic patients treatment** (instruction for both -GPs and practice nurses)
- Quality indicators

Preventive screening: results

70000
60000
50000
40000
30000
20000
10000
0

2012 2013 2014 2015 2016 2017

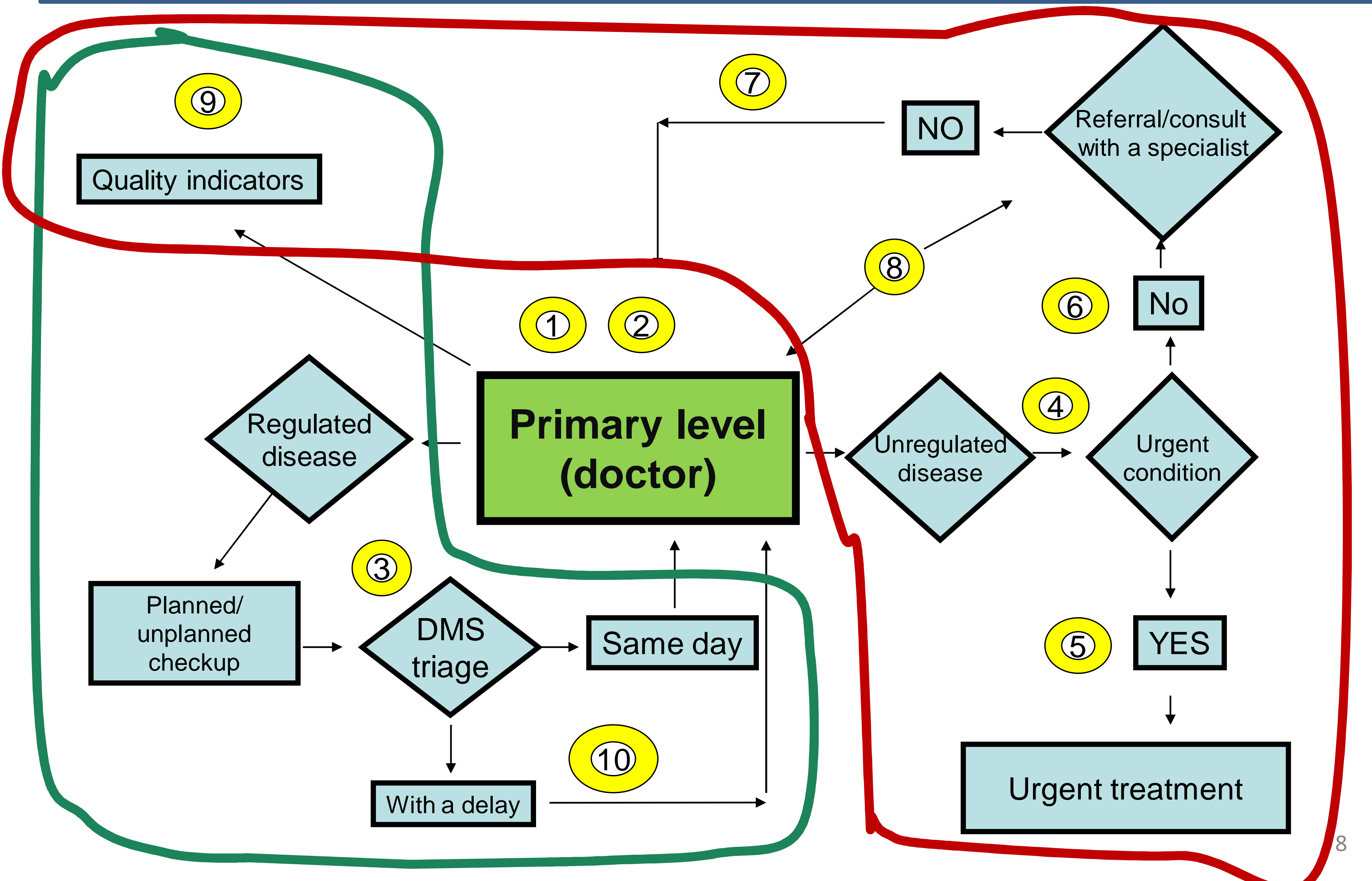
chronic pts
pts with risk factors
healthy pts

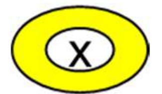
Management of chronic patients

Protocols for 8 chronic diseases:

- Hypertension
- Diabetes
- Asthma
- COPD
- Coronary hearth disease
- Benign enlargment of prostate
- Osteoporosis
- Depression

Chronic patients: protocols for GPs



10 parameters  of protocol

1. What to do/check at patient's regular visit
2. Criteria of stabile disease
3. Frequency of regular (planned) patients visits
4. Criteria for emergency condition
5. Measures at the primary care level when referring to the emergency room
6. Indications for referring to secondary / tertiary level (severe deterioration, complications)
7. How to manage acute deterioration of disease / poor regulation of disease at the primary care level
8. Communication pathway family physician-patient
9. Quality indicators of treatment of a patient with chronic disease
10. Medical instructions for diploma graduated nurse acting (protocols for diploma graduated nurse)

Protocol for COPD managment – physician and practice nurse role

1. What to do/check at patient's regular visit
2. Criteria of stabile disease
3. Frequency of regular (planned) patients visits

2. COPD control criteria in a given past period:

a. number and degree of COPD exacerbations,
b. CAT.

1. What to do when examining a patient with COPD?

a. Medical history: physical fitness, appetite, weight loss, symptoms of depression, other COPD symptoms, past COPD exacerbations, smoking status, medical therapy, participation in the one-month pulmonary rehabilitation program; has the patient attended a COPD school or smoking cessation program?
Patients complete the CAT questionnaire. To classify the disease into A/B/C/D they also complete the mMRC questionnaire (level of dyspnea).

b. Laboratory investigations: none are done routinely.

c. Physical examination: cyanosis, paleness, signs of heart failure, arrhythmias, blood pressure, body mass index, peripheral vascular pulse oximetry.

d. Classifying patients into appropriate spirometry category GOLD 1-4 (see attachment GOLD).

e. Classifying patients into appropriate category ABCD (see attachment ABCD).

f. Classifying patients in combined therapeutic category: GOLD + ABCD (for example GOLD 3, class B) due to medication prescription, rehabilitation or surgical therapy, evaluation of previously prescribed medication or other measures.

g. Annually: spirometry, ECG, echocardiography (as needed). A family medicine doctor should check and keep this information, also if done by a pulmonologist.

h. Inhaler technique should be assessed regularly either by a nurse or a doctor.

i. Assess the patient's compliance to treatment – ask patients to bring their unused medication with them.

j. If on long-term oxygen therapy: who takes care of it, who and how often is this treatment monitored at home?

k. Influenza and pneumococcal vaccination.

Protocol for COPD managment – physician role

4. Criteria for emergency condition
5. Measures at the primary care level when referring to the emergency room

4. Criteria for severe COPD exacerbation:

a. History: severe dyspnea.

b. Physical examination: vital signs, using accessory respiratory muscles, deterioration or presence of central cyanosis, peripheral edema, haemodynamic instability, signs of heart failure, somnolence, lethargy (an important sign of respiratory failure!).

c. Spirometry. We do not use it because patients are usually tired and the reliability of measurements is low.

d. Pulse oximetry and arterial blood gas analysis (secondary healthcare level) PaO_2 <8.0 kPa and/or SaO_2 <90 % with or without $PaCO_2$ >6.7 kPa on room air means respiratory failure and is an indication for supplementary oxygen therapy and hence for hospitalization. In additional acidosis with pH <7.36 and hypercapnia, the patient is critically ill and may need mechanical ventilation.

5. Measures at the primary healthcare level in cases of severe COPD exacerbation and means of transport to the hospital:

a. Increase bronchodilator therapy, for example salbutamol or salbutamol in combination with ipratropium 1 – 4 breaths per hour.

b. Glucocorticoid 32 mg per os, supplemental oxygen therapy to increase SpO_2 to 92 %.

c. Monitoring of vital signs.

Protocol for COPD managment – physician role

6. Indications for referring to secondary / tertiary level (deterioration, complications)

7. How to manage acute deterioration of disease / poor regulation of disease at the primary care level

8. Communication pathway family physician-patient

8. Patient – family doctor – pulmonologist communication pathways

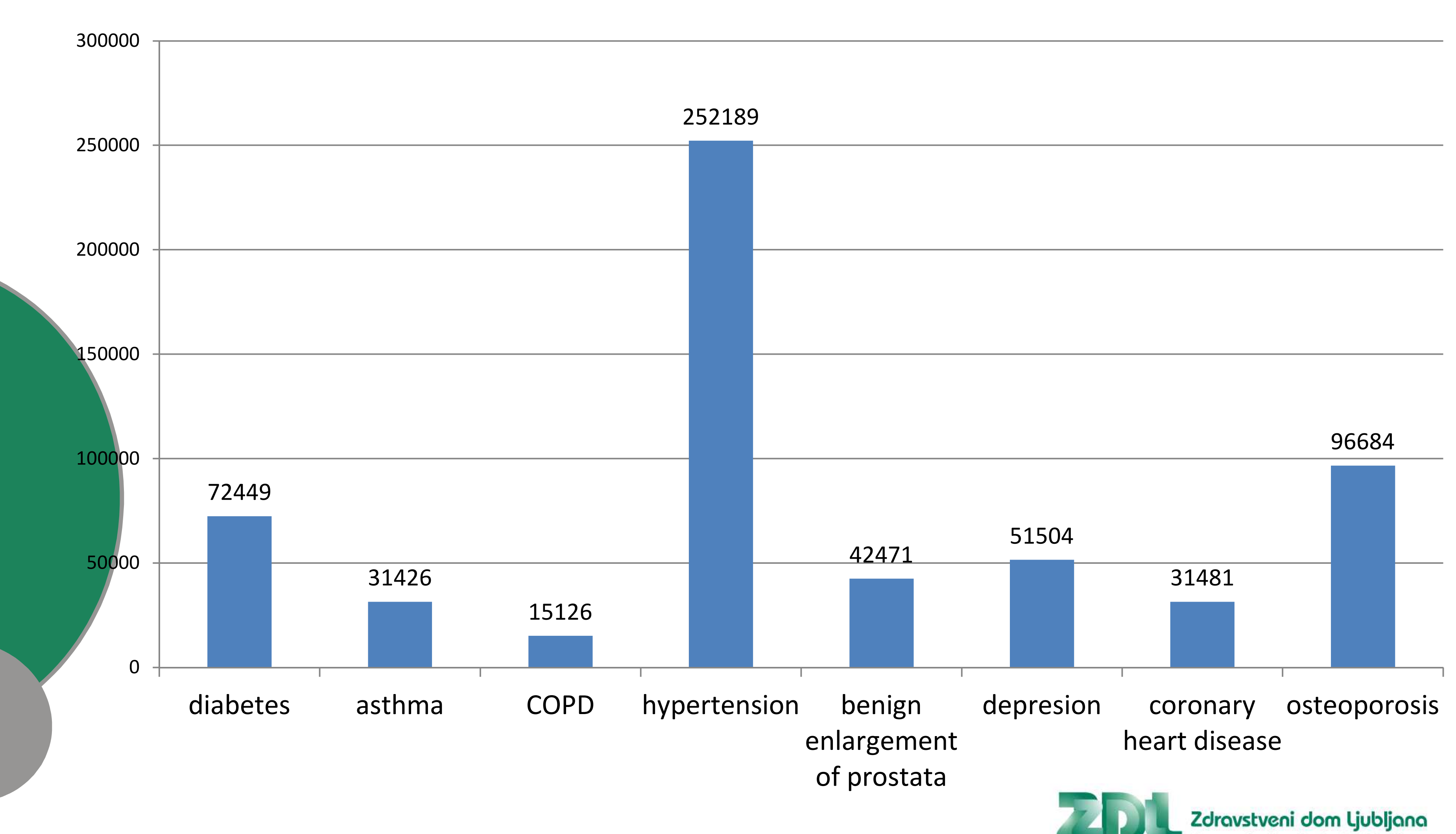
a. Promote genuine and substantive cooperation between a family doctor and pulmonologists and not just referrals of patients.

6. Consultation or referral to a pulmonologist

Based on the decision of the patient's family doctor, who knows the patient, in case of:

a. sudden severe dyspnea (especially when present at rest),
b. new respiratory failure or respiratory failure deterioration,
c. signs of right heart failure,
d. important co-morbidities,
e. new heart rhythm disorders or
f. failure of the initial, ambulatory treatment of COPD.

Registers of chronic diseases 2017



COPD- work competencies PN: GP/FP

Practice nurse (PN)

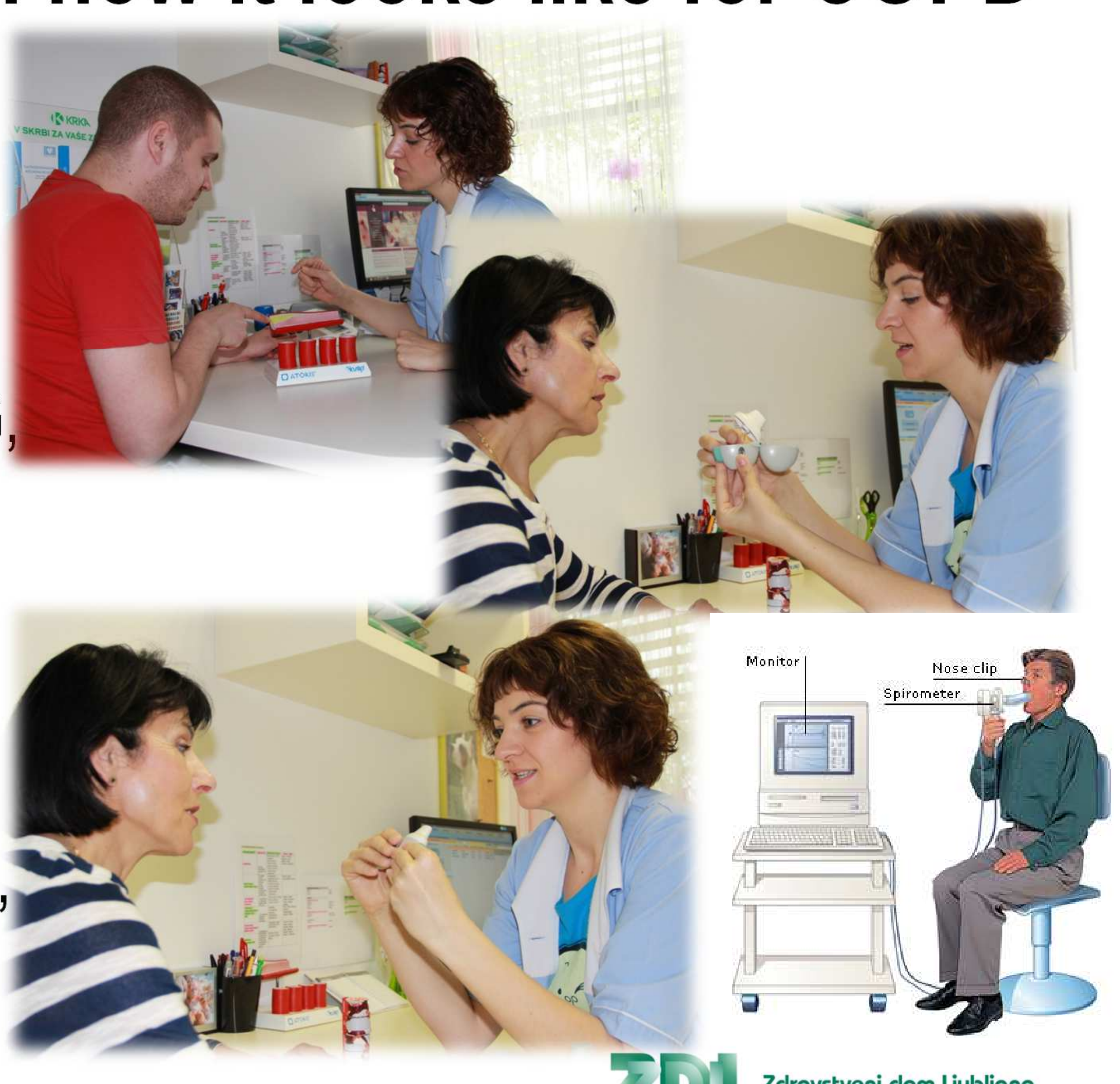
- systematic **preventive examination** of all patients over 30 years
- **spirometry** in all pts who smoke (and past smokers)
- regular **yearly check-ups** of COPD patients (incl ***spirometry, CAT, history, smoking sensation*** etc)
- **spirometry** in pts referred from the GP/FP
- **referring** unstable, deteriorated, non-compliant an those who demand examination to the GP/FP
- Health **education/counseling**

GP/FP

- **unstable** patients
- patients with **acute worsening** of COPD (dyspnoea + coughing +increased phlegm)
- patients **referred** from the practice nurse (i.e. unsatisfactory score on CAT)
- **interpreting spirometry** performed by the nurse
- **multimorbid COPD** pts
- Coordinates patients treatment
- Responsible for health outcome

Practice nurse: how it looks like for COPD

- Anamnesis,
- Smoking status,
- Measurements,
- Spirometry, ECG,
- CAT,
- Therapy-how to use it?
- Vaccination?
- health education, counselling and guiding.



Zdravstveni dom Ljubljana
Community Health Centre Ljubljana

What about GPs/FPs?

- **Asses** medical data/lab/measurements of „healthy“ chronic patients taken by PN (cca 30% of pts are in phase of deterioration)
- provide clinical examination
- **prolong or change the therapy** (drugs are prescribed on yearly basis) and to **refer pts**
- They dedicate **more time** to a single chronic patients in deterioration or to acute diseases
- They **lead a team** and are responsible for patients health outcome

Payment system

- General financing: **fee for service and fee for capitation** (50%:50%) (cca 148.000Eur per team/year, including lab tests)
- Allocation : **to contractor** (**GP** if concessionaire, **Health Centre** if public system)
- Leader of the team: GP/FP!!

Added value

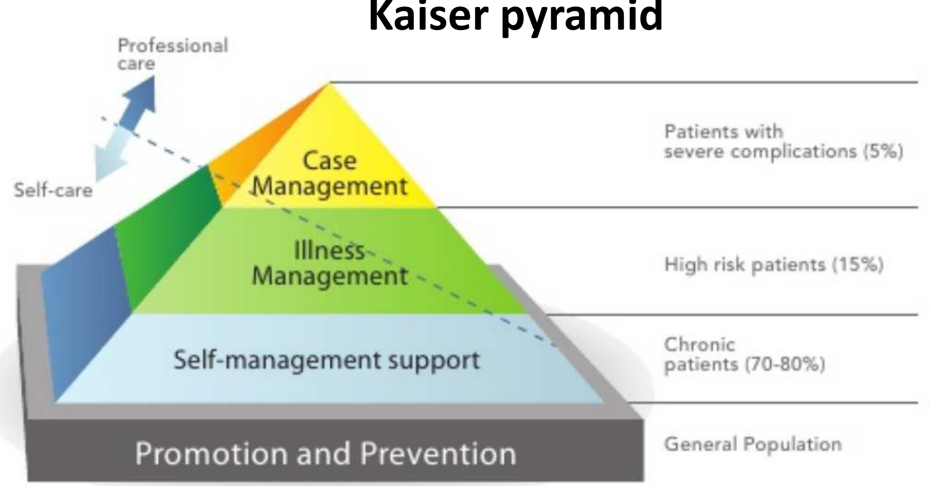
- GPs/FPs know the **(multi)morbidity** and **prevalence** of chronic diseases of their own patients
- **Systematically** check ups (what, when, who, how often, …)
- They achieve **quality indicators** (conditions/ processes/ outcomes)

- Important!: patients DO NOT want to take drugs if not necessary -they like to be **informed** and **self empowered**

Conclusion

- This comprehensive model of care **links** professionals **horizontally and vertically** and
- accent the **responsibility of patients**

Kaiser pyramid



Source :Integrated care models: an overview, WHO Europe 2016

THANK YOU FOR YOUR ATTENTION!