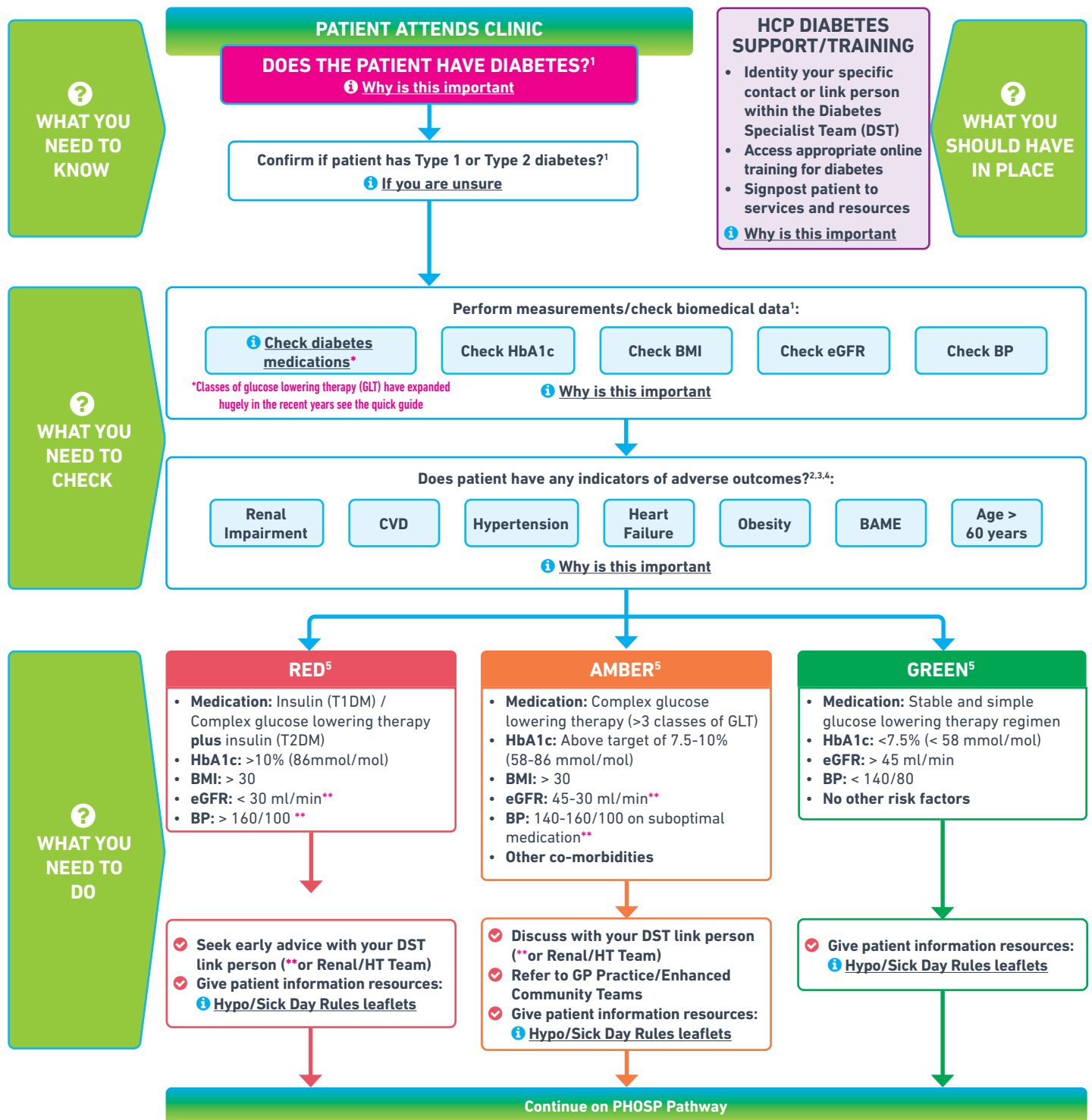


PATHWAY FOR PERSON WITH DIABETES IN THE COVID-19 FOLLOW-UP CLINIC



PATHWAY GUIDANCE/INFORMATION

DOES THE PATIENT HAVE DIABETES?

- 30% of patients hospitalised with COVID-19 have diabetes¹
- People with type 1 and type 2 diabetes have a relative increased risk of in-hospital mortality from COVID-19 (T1DM x 3, T2DM x 2)¹

PERFORM MEASUREMENTS/CHECK BIOMEDICAL DATA:

- Increased COVID-19 related mortality was not just associated with cardiovascular and renal complications of diabetes but also glycaemic control and BMI¹
- There was a correlation for HbA1c above 7.5% in type 2 diabetes and a HbA1c of 10% or higher in type 1 diabetes and increased the COVID-19 mortality rates¹

DOES PATIENT HAVE ANY MARKERS OF ADVERSE OUTCOMES?

- Male sex, old age, renal impairment, non-white ethnicity, social economic deprivation, a previous stroke and heart failure were also indicators of increased COVID-19 related mortality.²
- Diabetes status increases the need for medical interventions during COVID-19 and increased mortality risk patients with COVID-19. Well controlled blood glucose levels correlated with improve outcomes in infected patients³
- Association between COVID-19 related deaths and deprivation. There was substantially more deaths in the most deprived areas than in the least deprived areas, particularly individuals with type 1 and type 2 diabetes than those without diabetes⁴

HCP DIABETES SUPPORT/TRAINING

Short blended / digital education interventions for HCP (including non specialists) to enable safe and ongoing care for people living with diabetes (Type 1 and 2) with COVID-19.

Areas that are included:

- CaReMe (Cardiac, Renal and Metabolic care of the person with multimorbidity)
- Metabolic control, 3Ts, BP/ Weight
- Mortality and COVID-19
- Lifestyle support
- Risk of T2DM
- Psychological Support
- Sick day rules / hypo/ hyper/ SGLT2i / ACEi / ARB / Metformin
- ABCD: www.abcd.care/dtn/education

Potential stages of HCP education and Patient intervention:

- Prevention
- Inpatient
- Primary Care – post admission or COVID-19 with non-admission
- COVID-19 new diagnosis of diabetes following COVID-19 admission?
- Long COVID-19 will be in rehab pathway

For more information contact us on:

- www.edendiabetes.com
- eden@uhl-tr.nhs.uk

PATIENT DIABETES SUPPORT/TRAINING

Some trusted sources of information include:

- NHS: www.nhs.uk/conditions/diabetes/
- Diabetes UK: www.diabetes.org.uk
- Leicester Diabetes Centre: www.leicesterdiabetescentre.org.uk
- MyDESMOND Education Programme: www.mydesmond.com
- ABCD: www.abcd.care/dtn/education
- MyType1Diabetes: www.mytype1diabetes.nhs.uk
- T1 Resources: www.t1resources.uk

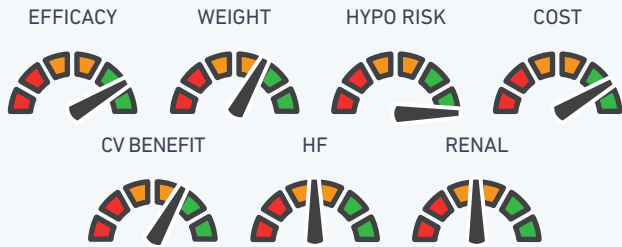
REFERENCES

- [Holman et al. Lancet Diabetes Endocrinol 2020; 8: 823–33](#)
- [Williamson et al. Nature 2020; 584: 430–436.](#)
- [Zhu et al. Cell Metab 2020; Jun 2;31\(6\):1068–1077.e3.](#)
- [Barron et al. Lancet Diabetes Endocrinol. 2020; 8: 813–22](#)
- [ABCD. A Quick guidance to Risk Stratification and recovery of Diabetes Services In the post – Covid-19 Era 2020](#)

QUICK GUIDE TO GLUCOSE LOWERING AGENTS (EXCLUDING INSULIN)

BIGUANIDES

Agents: Metformin

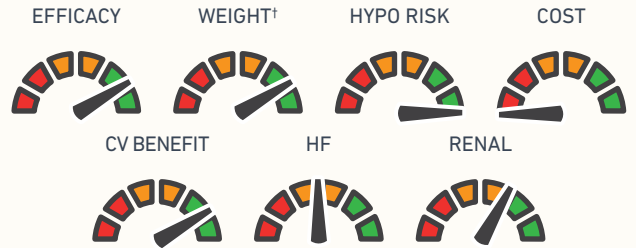


Side Effects:

- GI symptoms
- Vitamin B12 deficiency
- Rare cases of lactic acidosis

GLP-1 RECEPTOR AGONISTS

Agents: Exenatide, Dulaglutide, Liraglutide, Semaglutide, Lixisenatide



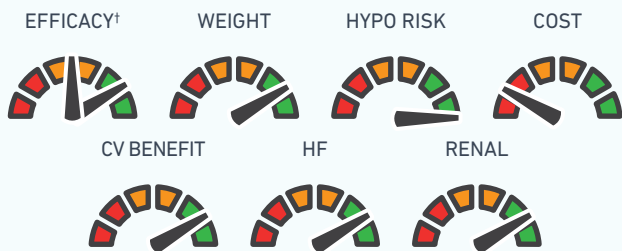
Side Effects:

- Risk of thyroid C-cell tumors
- GI side effects common
- Injection site reactions
- Acute pancreatitis risk

†Weight loss varies across the class.

SGLT2 INHIBITORS

Agents: Canagliflozin, Dapagliflozin, Empagliflozin, Ertugliflozin



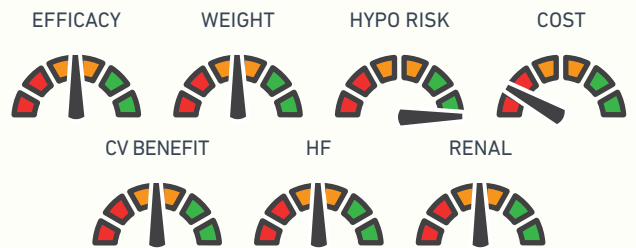
Side Effects:

- ↑ Amputations (canagliflozin)
- ↑ Genital infections
- ↑ Risk of DKA
- ↑ Risk of Fournier's gangrene
- ↑ Risk of fractures (canagliflozin)
- ↑ Risk of volume depletion

†Efficacy depends on renal function.

DPP-4 INHIBITORS

Agents: Sitagliptin, Saxagliptin, Linagliptin, Alogliptin

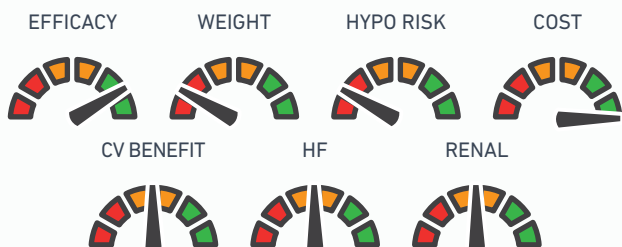


Side Effects:

- Rare urticaria/angioedema
- ↑ HF (saxagliptin)
- Potential acute pancreatitis risk
- Arthralgia

SULFONYLUREAS

Agents: Glibenclamide, Glipizide, Glimepiride

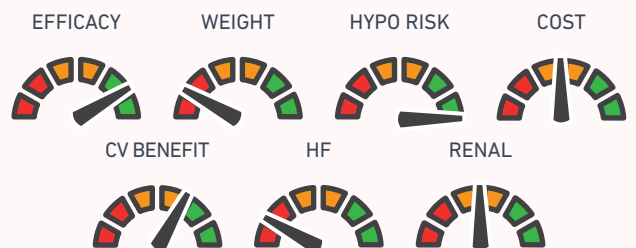


Side Effects:

- Increased risk of cardiovascular mortality based on studies of the older sulfonylurea tolbutamide
- ↑ Risk of hypoglycemia

THIAZOLIDINEDIONES

Agents: Pioglitazone, Rosiglitazone



Side Effects:

- ↑ Congestive heart failure
- ↑ Bone fractures
- ↑ Bladder cancer (pioglitazone)
- ↑ Fluid retention (edema)