```
using Medical.DTO.Cms1500;
using Medical.Model;
using Microsoft.EntityFrameworkCore;
using System;
using System.Collections.Generic;
using System.Linq;
using System. Threading. Tasks;
namespace Medical.BLL
  public class MedicalService : ServiceManager<Cms1500FormDTO, Cms1500SearchDTO>
  {
    private readonly MedicalContext? context;
    public MedicalService() { }
    public MedicalService(MedicalContext context)
       _context = context;
    public override async Task DeleteItemAsync(Cms1500FormDTO dto)
       Response.ErrorList.Clear();
       try
         if (_context == null) return;
         var form = await _context.CMS1500Forms
           .FirstOrDefaultAsync(f => f.FormId == dto.FormId);
         if (form != null)
           _context.CMS1500Forms.Remove(form);
           await _context.SaveChangesAsync();
         }
      }
       catch (Exception ex)
         Response.ErrorList.Add(new Error { Code = ex.Source, Message = ex.Message });
    }
    public override async Task GetItemAsync(Cms1500SearchDTO searchParams)
```

```
{
  Response.ErrorList.Clear();
  try
  {
    if ( context == null) return;
    var form = await context.CMS1500Forms
       .Include(f => f.DiagnosisCodes)
       .Include(f => f.ServiceLines)
       .FirstOrDefaultAsync(f => f.FormId == searchParams.FormId);
    Response.Item = MedicalDTOParser.ParseDTO(form);
  }
  catch (Exception ex)
    Response.ErrorList.Add(new Error { Code = ex.Source, Message = ex.Message });
}
public override async Task GetListAsync(Cms1500SearchDTO searchParams)
  try
    if ( context == null) return;
    var query = context.CMS1500Forms.AsQueryable();
    if (searchParams.FormId.HasValue)
       query = query.Where(f => f.FormId == searchParams.FormId);
    if (searchParams.CreatedDate.HasValue)
       query = query.Where(f => f.CreatedDate >= searchParams.CreatedDate);
    var totalItems = await guery.CountAsync();
    var forms = await query.Skip(searchParams.PageNumber * searchParams.PageSize)
                .Take(searchParams.PageSize)
                .ToListAsync();
    Response.List = forms.Select(MedicalDTOParser.ParseDTO).ToList();
    Response. TotalItems = totalItems;
  catch (Exception ex)
    Response.ErrorList.Add(new Error { Code = ex.Source, Message = ex.Message });
```

```
}
  }
  public override async Task SaveItemAsync(Cms1500FormDTO dto)
    Response.ErrorList.Clear();
    try
    {
       if (_context == null) return;
       var form = await _context.CMS1500Forms
         .Include(f => f.DiagnosisCodes)
         .Include(f => f.ServiceLines)
         .FirstOrDefaultAsync(f => f.FormId == dto.FormId);
       if (form == null)
         form = new CMS1500Form();
         MedicalModelParser.ParseModel(form, dto);
         form.CreatedDate = DateTime.UtcNow;
         _context.CMS1500Forms.Add(form);
       }
       else
       {
         MedicalModelParser.ParseModel(form, dto);
         form.UpdatedDate = DateTime.UtcNow;
       }
       await _context.SaveChangesAsync();
    catch (Exception ex)
       Response.ErrorList.Add(new Error { Code = ex.Source, Message = ex.Message });
}
public class Cms1500SearchDTO: SearchDTO
  public int? FormId { get; set; }
  public DateTime? CreatedDate { get; set; }
  public DateTime? ServiceDateFrom { get; set; }
  public DateTime? ServiceDateTo { get; set; }
}
```